

State of Nevada
Department of Human Resources
Health Division

Capacity Development Strategy

Bureau of Health Protection Services

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Capacity Development Strategy for Existing Public Water Systems

Introduction

The Safe Drinking Water Act (SDWA) amendments of 1996 authorize a Drinking Water State Revolving Fund (DWSRF) loan program to help public water systems finance the infrastructure needed to achieve or maintain compliance with SDWA requirements and to achieve the public health protection objectives of the Act. Section 1420(c) of the Act directs the Administrator of the U.S. Environmental Protection Agency (EPA) to withhold a portion of a State's allotment under § 1452 unless the State develops and implements a capacity development program to assist existing public water systems (PWS) in acquiring and maintaining technical, managerial, and financial capacity.

This Capacity Development Strategy for Existing Public Water Systems describes how the Nevada State Health Division (NSHD), Bureau of Health Protection Services (BHPS) is going to assist existing water systems in acquiring and maintaining technical, managerial, and financial capacity and meeting the requirements detailed in §1420(c) of the SDWA to ensure that the State receives its full DWSRF allotment. To meet these requirements, Nevada must develop and begin implementing this strategy to assist PWS in acquiring and maintaining capacity to comply with the Act by August 6, 2000.

Note: Nevada Revised Statute (NRS) 445A.807 defines the term "capability" to have the meaning ascribed to the term "capacity" in 43 U.S.C. §§ 300g-9 and 300j-12. Throughout this document, the term's "capacity" and "capability" are used interchangeably.

According to the EPA document, *Guidance on Implementing the Capacity Development Provisions of the Safe Drinking Water Act Amendments of 1996*, Nevada must document the following to demonstrate that it has met the basic requirements of § 1420 (c):

(I) Solicitation and Consideration of Public Comments:

Nevada must solicit public comments on the five program elements listed in §1420(c)(2)(A-E), as well as describe relevant public comments and its responses to them.

(II) Program Elements:

Nevada must describe which of the listed elements in §1420(c)(2)(A-E) that were included or excluded from its strategy and why each element was included or excluded.

(III) Strategy:

Nevada must describe how the selected elements, when taken as a whole, can be rationally considered to constitute a strategy to assist PWS in acquiring and maintaining technical, managerial and financial capacity.

(IV)

Implementation:

Nevada must describe the State's current efforts for its strategy and its plans for strategy implementation.

(V) Future Consideration:

Every three years, Nevada must submit to the EPA Administrator a list of community water systems (CWS) and non-transient non-community water (NTNC) systems that have a history of significant noncompliance and the reasons for noncompliance.

By August 6, 2001, Nevada must submit to the EPA Administrator a report on the success of enforcement mechanisms and initial capacity development efforts in helping systems in significant noncompliance achieve and maintain capacity.

Finally, not later than two years after the date on which Nevada first adopts a capacity development strategy, and every three years thereafter, the primacy agency, NSHD, shall submit to the Governor a report on the efficacy of the strategy and progress toward improving the capacity of public water systems in the State.

Note: As the primacy agency for Nevada, the NSHD assumes primary enforcement responsibilities as defined under 42 U.S.C. §§ 300g-2

Elements (A-E) of Section 1420 requires that states consider, solicit public comment on, and include as appropriate the following:

- A. Methods or criteria to prioritize systems.** The methods or criteria that the State will use to identify and prioritize the PWS most in need of improving technical, managerial, and financial capacity.
- B. Factors that encourage or impair capacity development.** A description of the institutional, regulatory, financial, tax, or legal factors at the Federal, State, or local level that encourage or impair capacity development.
- C. How the State will use the authority and resources of the SDWA.** A description of how the State will use the authorities and resources of this title or other means to assist PWS in complying with National Primary Drinking Water Regulations (NPDWR), encourage the development of partnerships between PWS to enhance the technical, managerial, and financial capacity of the systems, and assist PWS in the training and certification of operators.
- D. How the State will establish the baseline and measure improvements.** A description of how the State will establish a baseline and measure improvements in capacity with respect to NPDWR and State drinking water law.
- E. Procedures to identify interested persons.** An identification of the persons that have an interest in and are involved in the development and implementation of the capacity development strategy (including all appropriate agencies of Federal, State, and local governments, private and nonprofit PWS and PWS customers).

(I) Solicitation and Consideration of Public Comments:
Nevada must solicit public comments on the five program elements listed in §1420(c)(2)(A-E), as well as describe relevant public comments and its responses to them.

To satisfy §1420(c)(2)(E), the BHPS, with the assistance and guidance of *The University of New Mexico Environmental Finance Center (EFC)*, has involved the public or stakeholders in the capacity development process by forming a Capacity Development Stakeholder Group (CDSG) (Appendix 1). As a group, the purpose was to provide public input to the BHPS that would be used in development of an existing water system capacity development plan. The members of the CDSG included agencies of Federal, State, and local governments, private and public PWS, PWS customers, as well as drinking water organizations and associations (Appendix 2).

Members include:

Andy Belanges	Southern Nevada Water Authority
Bill Lynn	Clark Co. Health District
Bob Loding	Tri-State Water Operations, Inc.
Brian Randall	Resource Concepts, Inc. (Town of Minden; Gardnerville Water)
Charles Lawson	Nevada Rural Water Association
Cheryl Couch	USDA-Rural Development
Craig Steele	Nevada Public Utilities Commission
Darrin R. Price	Sun Valley General Improvement District
David R. MacFaviane	Hillcrest Manor Water Users Association
Diana Langs	Sun Valley General Improvement District
Don Allen	Silver Springs Mutual Water
Fritz Steppat	Washoe County
James Weeks	Beatty Water and Sanitation
John Enloe	Eco:Logic Engineering
Jon Palm	Nevada State Health Division
Kirk Medina	City of Henderson
Larry Hall	West Wendover City
Leasa Hermansen	City of Elko
Lynn Forsberg	Elko County
Michelle Moustakas	EPA
Mike Holm	USDA-Rural Development
Mike Winters	Virgin Valley Water District
Mike Workman	Incline Village General Improvement District
Phil Walsack	Rural Community Assistance Corporation
Roger Roepke	Lumos and Associates
Ron Zegers	Southern Nevada Water Authority
Stuart Powell	Nevada Rural Water Association
Terri Svetich	Washoe County Department of Water Resources
Valerie Schulte	Las Vegas Valley Water District

Once the group was identified, they were charged with four general tasks to accomplish. Each task, identified as input sessions 1 through 4, is described below:

Input Session 1: Small System Problem Characterization in Nevada

They were asked to brainstorm problems that small systems face and then to decide which problems were the most critical. The intent of this session was to focus on the issues facing water systems and to demonstrate the need for some assistance under a Capacity Development Program. This session was also intended to demonstrate the extent to which the group was in agreement regarding problems facing systems.

Input Session 2: Impairments and Enhancements to Capacity Development

In this session, stakeholders were asked to think about those factors within the State of Nevada that impairs systems from achieving adequate capacity and those factors that help systems achieve adequate capacity. Stakeholders were asked to think very broadly about the factors that impair or enhance capacity, including institutional, regulatory, financial, tax or legal factors at the Federal, State or local level. They were told to think about all State agencies, not just BHPS. The stakeholders were asked to brainstorm the impairments and enhancements and then to choose the two or three most critical impairments and the most important enhancements. The intent of this exercise is to give BHPS an indication of the types of impairments that the strategy should try to address and the enhancements that the Capacity Strategy should build upon.

Input Session 3: Additional Programs or Activities to Assist Systems

In this session, it was explained that although developing a Capacity strategy is a new requirement under the 1996 SDWA amendments, the provision of services to help systems comply with regulations is not new. The BHPS has many programs already in place to assist systems, such as sanitary surveys, CCR, operator certification and training, State Revolving Fund, plan review of new or upgraded systems, enforcement, assistance provision through BHPS staff and through contracted assistance providers. In addition, stakeholders were presented with descriptions of programs that some of the other states provide to give examples of a variety of activities that states are doing and to explore the options for Nevada. Specifically, examples were given of programs in Georgia, Pennsylvania, Arizona, New Mexico, Louisiana, Texas, and Mississippi.

Stakeholders were asked to think about the current activities that Nevada already has and whether those activities should be expanded, revised or modified in any way. Stakeholders were then asked to think about the impairments and enhancements to Capacity that they previously discussed to see if additional programs were necessary to try to address some of the impairments and build upon the enhancements. The discussion of the additional programs from other states was intended to help stakeholders think creatively about the types of additional programs Nevada should add as part of its strategy. The stakeholders were told to brainstorm programs that they would like to see the State add under the Capacity strategy process. Then stakeholders were told that, realistically, the State can only develop a few additional items as part of the strategy process due to personnel and money constraints. Therefore, if the items on the brainstormed list had to be viewed in that context, which items would be the most critical for systems? The stakeholders were asked to pick the top two or three programs from the list.

The intent of this session was to provide some input to the BHPS on various ideas for programs or activities that should be examined for possible inclusion within the Capacity strategy, now or at some point in the future. The list of all possible activities is quite lengthy and is included in Appendix 3 Attachment 3 of the Summary report prepared by the EFC. This attachment shows the ideas broken down into various categories. The highest priority programs or activities are listed with some ideas representing new programs or activities while others are modifications to existing programs.

Input Session 4: Goals and Priorities for a Capacity Strategy §1420(c)(2)(A-E)

In this session, stakeholders were asked to think about what they hoped to achieve with a Capacity Strategy. They were asked to think about the report to the Governor in two years and what they hoped the strategy would have achieved. The stakeholders were then asked to list the goals they have for the strategy.

A summary of the meetings is attached as Appendix 3. This draft and summary of information from the meetings was forwarded to stakeholders. In addition to those materials, the draft Capacity Development Strategy was also posted on the BHPS website for the public to view and comment. As a way to involve additional stakeholders, the BHPS held one additional Public Workshop / Stakeholder Input Session in Carson City to present the draft capacity development plan and obtain comments. (Stakeholder Invitation - Appendix 4, Public Notice Announcement - Appendix 5) After completion of the additional Public Workshop/Stakeholder Input Session, a public information statement will notify the public that it is now available for continued review and comment (Public Notice, Appendix 6). Continued Comment and Review through the BHPS.

Relevant Comments and Responses

A final public workshop/stakeholder group meeting was held on June 29, 2000. The purpose of this meeting was to gather input and comments regarding the draft Capacity Development Strategy. The draft strategy was developed from input gathered during stakeholder meetings held in November and December of 1999. The attendees at the meeting represented a variety of organizations that have an interest or “stake” in drinking water. A complete summary of this meeting has been prepared by the EFC along with a list of actual attendees and has been attached to the end of this report (Appendix 10). A copy of the letter inviting all stakeholders is attached as Appendix 4.

After general introductions and a brief overview of the capacity development strategy requirements, comments were solicited over seven topics with respect to the BHPS submittal to EPA. The topics were as follows:

Topic 1: Prioritization of Systems Most in Need of Assistance

What comments are there with respect to the BHPS plan to prioritize public water systems in need of assistance.

Topic 2: Assessment of System Capacity

Attendees were asked to review the capacity assessment form that can be used by a technical assistance provider and provide comments on the process.

Topic 3: Programs to Assist Systems with Compliance

Attendees were asked to provide comment on programs under development now and several programs that BHPS would like to develop and implement in the future as part of the capacity development program.

Topic 4: Encouraging Partnering Between Systems

Attendees were asked to describe partnering efforts that were ongoing in Nevada and other things that BHPS could do as part of its capacity development strategy to further encourage partnerships.

Topic 5: Measuring Success

Attendees were asked to comment on the proposed measures to evaluate the success of the capacity program.

Topic 6: Continued Stakeholder Involvement

Attendees were asked to provide feedback on the frequency of stakeholder and public involvement in this continuing program.

Topic 7: Additional Comments

Finally, attendees were asked to provide any additional comments on the capacity program.

For the above seven topics, responses were categorized into four groups: a) incorporate into the program now; b) consider the item for future incorporation; c) not for consideration followed by an explanation; and d) as an information item only.

Topic 1: Prioritization of Systems Most in Need of Assistance***Incorporated into the program***

- Two typographical errors in the Health and Water Quality factors write up. Under medium high, “GWLJSWI” should be “GWUSWI.” Under medium “IVICL” should be “MCL.”
- Who will manage the matrix to determine systems most in need of T, M, F assistance? (This question was answered at the session by responding that BHPS would be the entity to manage the matrix.)
- How many years back will BHPS go back to determine the compliance record? This issue was discussed by the group with considerable input from attendees. It was decided that one year would be a good time frame.

Consider for Future Incorporation

- For Certified Operator category, under the medium low items, adds outstanding sanitary survey deficiency items (i.e., deficiencies noted on the sanitary survey that were not addressed at the time of the next survey.) This item may need to be added to the sanitary survey form to make sure it is noted at the time of the survey if it is not already included.

Topic 2: Assessment of System Capacity

Consider for Future Incorporation

- The form is called an "inspection" approach. This terminology seems to sound regulatory or coercing and this program is supposed to be voluntary. Inspection has negative connotations and will cause problems as the capacity development program moves forward. This term should be changed to something else, such as evaluation.
- In some cases, the board of a water system does not agree with the results of the assessment. There should be an opportunity for the board to discuss its concerns regarding the results with the reviewer prior to finalizing the report.
- There should be an "exit interview" with the board, the operator, public works officials, and other appropriate personnel to discuss the results of the assessment. This approach may even facilitate a dialogue process between the board and operator, which may be an additional positive aspect of the survey.
- The tool should be simpler for small systems.
- Nevada has a spreadsheet approach for financial review that could be incorporated into the process. The system should use it for their own financials. It should be used as a tool by the technical assistance provider to help the system, but it should not be used as an evaluation tool.
- The format of the financial portion should be changed from a yes/no approach to a lengthier essay style.

Not for Consideration

- Could the assessment form deficiencies be added to the enhanced sanitary survey? Would this give a little more weight and importance to the process? A discussion that followed this comment brought out the point that the ties to enforcement if this were done would ruin the voluntary nature of the program and would end up negatively impacting the process instead of positively impacting it.

Topic 3: Programs to Assist Systems with Compliance

Public Education

Incorporated into the Program

- The program needs to be evaluated annually to make sure it is working and not just wasting money.

Consider for Future Incorporation

- National Rural Water Association (NRWA) has a wellhead protection program that includes public education and board training.
- CCRs are an attempt to provide public education materials, but they are too hard to understand and they do not do the job. Elko used a different approach that may be worth examining. Also, University of Nevada - Reno Cooperative Extension (UNR) did a study on CCRs and their effectiveness that might be worth looking at. It is difficult to present technical information to the general public in an easy to understand way. The CCRs should include rate information.
- Publish periodic articles in local newspapers that discuss information about public water system requirements and operations to help educate systems and customers.

Not for Consideration

- Rate structures are not necessarily a good measure of the systems' capabilities because they are too political. A system may be working well, but may have difficulty with the political aspect of setting rates. It is not a good tool for capacity assessment.

Information Only

- Rural Development does a rate study for the State, which is a good public information/education tool.
- Las Vegas Water System does customer surveys to determine how the customers feel about the system. They get a good response rate from the process. One result was that customers said they want more information about the system.

Board Training

Consider for Future Incorporation

- People should receive a positive inducement to come to Board Training, not a negative one. "Bonus points" should be given to systems that attend Board Training or receive certification for SRF funding.
- A board of directors or management team should be a part of the team to make sure the water system is working well.
- Nevada League of Cities and Nevada Association of Counties have certificates for "Certified Public Officials." Could this program include water board and municipal management personnel? Could BHPS tie to these organizations to achieve Board Training?

Information Only

- Elected municipal officials are in a different position than board members. The BHPS could not use an approach like Mississippi's mandatory board training enforcement process of allowing board members to vote out a board member that does not get certified for municipal officials because they could not be voted out in this manner.

Water Handbook

Incorporated into the program

- Consensus of the attendees was that this was a very good idea and very much needed.
- A hard copy is needed; not enough people have Internet-Web access.
- The handbook would need to be updated annually. A calendar approach combining this information with the training information would be a good way to do this. The calendar could be mailed out annually to all water systems.

Enhanced Sanitary Survey Process

Consider for Future Incorporation

- Systems that are having problems should be required to hook up to a viable system. There are too many water systems that are having consistent problems and should not be in the water business. (New system strategy is attempting to address this issue for the future.)
- Possibly, BHPS could include "so you want to be a public water system" type information in the public education process to try to ensure that potential water system owners know difficult it is to run a public water system.
- Enhanced Sanitary Surveys should be performed every six years, instead of every three.

Information Only

- Problem NCNTs and TNCs change ownership often, which makes the situation worse.

Topic 4: Encouraging Partnering Between Systems

Incorporated into the Program

- The process Infrastructure for Nevada Communities (INC) uses is a partnership process. The various agencies meet, in part, to talk about systems working together to solve problems.
- Rural systems are already working together out of necessity and sharing equipment and other resources. This process is informal partnering.

Consider for Future Incorporation

- Lifeline Utilities Task Force exists in Washoe County to look at emergency response. This program includes all utilities in the county, not just water, but is a mechanism to get systems talking to each other.
- Nevada Test Site Corridor was set up to deal with Yucca Mountain issues, but it may be a partnering approach.
- The BHPS should use its enforcement authority when the system is in very bad shape in terms of compliance and capacity to force it to hook up to a good system.
- The Nevada Rural Water Association Conference could encourage informal networking groups to form to get operators and systems talking to each other.
- Partnering efforts or networking groups could be initiated through Nevada League of Cities or Nevada Association of Counties.

Information Only

- In the Las Vegas area, the Southern Nevada Water Authority, which includes water purveyors in the area, meets on a regular monthly basis.

Topic 5: Measuring Success

Incorporated into the Program

- SNCs (Significant Non-Compliers) are not good measurements because the State only has one SNC. As new regulations come in, such as Arsenic and Radon, the number of SNCs may go up temporarily as systems try to comply.
- The number of Certified Operators is a good measure for Nevada.
- The number of participants at training sessions may not be a good measure for Nevada because there are too few people in the State to make it valid. Maybe the number of systems impacted by training would be a better measure.

Consider for Future Incorporation

- Consider adding a measure to look at the geographic spread of training and whether or not that is improving.

Topic 6: Continued Stakeholder Involvement

Incorporated into the Program

- The consensus of the group was that a meeting should be held twice per year and any information that needed to be shared between these meetings could be shared via the Web site or e-mail. The meetings should have a very specific agenda that should be sent out at least one month in advance. One of the meetings should be at the Nevada Rural Water Association Annual Conference so the State can involve more water systems.

Topic 7: Additional Comments

Incorporated into the Program

- BHPS should create sampling monitoring schedules for every system similar to what Montana is doing. BHPS already creates sampling monitoring schedules through the vulnerability assessment program.
- Recommendation that the following systems receive notification of upcoming Capacity Development workshops: Caliente, Carlin, Lovelock, Mesquite, Wells, Yerington, Indian Hills, Town of Gardnerville, and Gabbs.

Consider for Future Incorporation

- The stakeholder list should include contract operators.
- Clark County administers a long-term, low-interest loan program. This program could provide an additional enhancement to the Capacity Development Strategy.
- BHPS should put out a training calendar similar to Montana's training calendar.

(II)

Program Elements

Nevada must describe which of the listed elements in §1420(c)(2)(A-E) that were included or excluded from its strategy and why each element was included or excluded.

The SDWA requires that Nevada consider each of the five programmatic elements for inclusion in capacity development strategy; however, it does not require Nevada to use specific tools to implement the selected elements. Nevada will include all of the elements in the strategy as described below:

Element A: Methods or Criteria to Prioritize Systems

Section 1420(c)(2)(A) states that *"In preparing the capacity development strategy, the State shall consider, solicit public comment on, and include as appropriate the methods or criteria that the State will use to identify and prioritize the public water systems most in need of improving technical, managerial, and financial capacity."*

The CDSG carefully considered this element and decided to start by identifying existing information that could be used in the prioritization process. Tools that currently exist:

- BHPS significant noncompliance (SNC) list
- Prioritized list of approximately 80 systems targeted for Technical Assistance (Appendix 7)
- Sanitary Surveys: Every three years for CWSs
- Operator Certification Program: As of July 1, 2000, all PWS are required to have a certified operator.
- Cooperation with other organizations
- Training/Technical Assistance Programs
- Source Water Assessment Program (SWAP)
- Well Head Protection Program (WHPP)
- Underground Injection Control Program (UICP)

After identifying existing tools, the BHPS reviewed a matrix system developed by the State of Oregon and decided that BHPS could use the Oregon system with modifications to fit Nevada's needs. The matrix system uses risk factors relative to compliance problems and ranks systems most in need of help (Appendix 8). This will allow BHPS to effectively use its limited resources while reaching the systems in need of assistance.

The matrix system Nevada proposes to use to identify and prioritize water systems was developed by the Oregon Health Division. A description of Oregon's system can be found in the "Report of Finding on Improving the Technical, Financial and Managerial Capacity of Oregon's Public Water System" (Drinking Water Advisory Committee to the Oregon Health Division).

The risk types initially included in Nevada's matrix are:

1. Health/Water Quality
2. Monitoring and Reporting
3. Certified Operator Information
4. Managerial Information
5. Financial Information

Health / water quality, monitoring, reporting, and operator information are available from existing PWS information files. Managerial and financial information has been collected through technical assistance contracts. It is anticipated that all information will be integrated into the matrix within three years of approval to this strategy through future contracts and revised sanitary survey results.

Element B: Factors that Encourage or Impair Capacity Development

Under § 1420(c)(2)(B) of the SDWA, Nevada must consider developing a description of the *"institutional, regulatory, financial, tax, or legal factors at the Federal, State, or local level that encourage or impair capacity development."*

The CDSG identified 100 factors at the Federal, State and local levels that are either enhancements or impairments to public water system capacity. A complete listing of these factors is contained in the summary report (Appendix 3) from the stakeholder input sessions.

Factors that Encourage Capacity Development

There are a number of factors in Nevada that currently enhance the capacity of public water systems. One important factor is that BHPS funds or oversees all programs that deal with drinking water systems. These programs include:

- **Drinking Water Program.** The Drinking Water Program implements the provisions of the Safe Drinking Water Act. Enhancements to capacity within this program include operator certification and plans and specifications review.
- **Public Water System Funding.** This program is responsible for administering the Drinking Water State Revolving Fund (DWSRF) loan program. The control point for this program is deciding financial eligibility and approving loans.
- **Source Water Assessment Program.** This program is responsible for conducting source water assessments for all public water supply systems as required by the 1996 SDWA amendments. The control point for this program will be determining the susceptibility of the water supply system to contamination.
- **Capacity Development Program for New PWS.** BHPS also has the authority to ensure that all new community and non-transient non-community water systems have adequate technical, managerial and financial capacity prior to issuing a permit to operate. This will help eliminate the formation of nonviable water systems.
- **Operator Certification Program.** The State's operator certification program enhances technical and managerial capacity of community and non-transient non-community water systems.

An additional enhancement includes the Technical Assistance program funded through Nevada's DWSRF program. Through this program the BHPS and other organizations such as the Rural Community Assistance Corporation (RCAC), Nevada Rural Water Association (NRWA), and the University of Nevada Cooperative Extension programs provide technical assistance to water systems that enhances capacity.

From the input sessions, several additional areas were identified as factors that encourage capacity development.

Most Important Enhancements

- Accessibility of BHPS staff –
Note: At all three public input sessions, the public commended the BHPS staffs accessibility and availability. (A significant enhancement for the program)
- Good technical support
- State agency people are helpful and cooperative:
 - Return calls in a reasonable time
 - Are accessible
 - Will support the PWS
 - Are consistent from beginning to end
- Availability of funds
- Adequate number of technical assistance providers
- Nevada Water and Wastewater Training Coalition
- Economic diversification
- Consumer confidence reports
- Operator certification new requirements
- Good master planning
- Drinking Water State Revolving Fund (DWSRF) / RVS / AB 198 – Funding
- Infrastructure for Nevada Communities (INC)
- State working through City and County to host meetings and share information

Factors that Impair Capacity Development

Just as there are factors that enhance capacity in water systems, there exist factors that impair the capacity of water systems in the State. This section is not meant to address all possible factors that impair the capacity of water systems; rather, it will highlight the more prevalent factors.

Impairments at the Federal Level

- Distrust of government (lack of education to the consumer);
- Unfunded mandates; and
- Radon and arsenic standards.

Impairments at the State Level

- Distrust of government (lack of education to the consumer);
- Regulations, red tape;
- State not advocating for systems with Federal regulations;
- State does not fund its own programs; and
- Some consumers now pay costs previously paid for by the State.

Impairments at the Local Level

- Lack of planning;
- Lack of economy of scale;
- Inadequately trained boards and staff;
- Lack of public information;
- Resort economy;
- Large disparity in incomes in rural areas; and,
- Geographic location impairs regionalization.

Element C: Description of How Nevada Will Use the Authority and Resources of the SDWA

Section 1420(c)(2)(C) of the SDWA states Nevada must consider developing

"...a description of how the State will use the authorities and resources of this title or other means to - (i) assist public water systems in complying with national primary drinking water regulations; (h) encourage the development of partnerships between public water systems to enhance the technical, managerial, and financial capacity of the systems; and (iii) assist public water systems in the training and certification of operators. "

In developing a description on how Nevada will help existing water systems gain adequate capacity, the CDSG looked at the impairments and enhancements listed above, existing tools available, and possible tools that could be developed to help water systems gain capacity.

Existing Tools

- Sanitary Surveys: Every three years for CWSs
- Operator Certification Program: All community and non-transient non-community public water systems will be required to have a certified operator.
- Cooperation with other organizations
- Training/Technical Assistance Programs
- Enforcement

Tools in Development

- Source Water Assessment Program (SWAP)
- Well Head Protection Program (WHPP)
- Underground Injection Control Program (UICP)

Tools to Develop

- **Public Education:** Development of public education materials will help address the following impairments: lack of consumer education, lack of public awareness, and unwillingness to pay increased rates. Tools that could be developed include news releases, water bill inserts, public meetings, and education through public schools that are re-evaluated on an annual basis.
- **Board Training:** By educating board members on financial and managerial issues related to the water system, the following impairments can be addressed: lack of training/education at the board level, lack of planning, and lack of financial management. Training materials have been developed by other organizations (*i.e. RCAC's Board Training Manual and the National Training Center for Small Communities Drinking Water Short Course for Local Officials*) that can be used in this endeavor.
- **Water System Planning Manual:** Development of a manual would address all capacity issues. It would help systems develop and implement a planning process aimed at enhancing technical, managerial and financial capacity.
- **Capacity Assessment:** This assessment addresses all areas of capacity. With the help of technical assistance contracts, Nevada has developed a Capacity Development Assessment Tool for use in the DWSRF loan program (Appendix 9). With the help of technical assistance providers this assessment could be completed and then used to determine the type of needed technical assistance.
- **Drinking Water Handbook:** A handbook on drinking water statutes and regulation with specific requirements could be developed and tailored to specific types of systems. This manual would help water system operators and managers understand complex compliance and regulatory issues. The handbook would also include information on contacts at State agencies for various requirements.
- **"Enhanced" Sanitary Survey:** Currently BHPS conducts sanitary surveys on all PWS every three years. Combining BHPS's "enhanced" sanitary survey information with data collected from technical assistance contracts through Nevada's DWSRF program will provide an objective ranking of all PWS. For water systems receiving high scores on Nevada's Matrix, additional applicable technical, managerial, and/or financial assistance could be provided where it is most needed.
- **Drinking Water State Revolving Fund Loan Set-Asides:** Section 1452(k) of the SDWA Amendment of 1996 authorizes Nevada to spend up to 15 percent of the capitalization grant each fiscal year on a number of different activities. One such activity is to provide assistance through a capacity development strategy including technical and financial assistance.

Element D: Establishing a Baseline and Measuring Improvements

Under § 1420(c)(2)(D) of the SDWA, Nevada *"must consider, solicit public comment on, and include as appropriate - a description of how the State will establish a baseline and measure improvements in capacity with respect to national primary drinking water regulations and State drinking water law."*

Nevada's current programs or tools to benchmark the status of existing PWS for the capacity program include the BHPS significant noncompliance (SNC) list and a prioritized list of approximately 80 systems presently in need of technical assistance. The Drinking Water Program within BHPS currently tracks certain measures/benchmarks each quarter. These measures will be used as important indicators to gauge the success of Nevada's Capacity Development Program.

They are:

- Number of systems (by type);
- Population served (by type);
- Number of systems with MCL violations (by type);
- Number of systems with monitoring/reporting violations;
- Significant Noncompliance (SNC List: An ongoing evaluation of the SNC list will help the State understand whether capacity program activities are effective over time.)
- Number of Certified Operators.

In addition to the measures listed above, the volume of capacity activity will be tracked. This will include:

- The number of capacity assessments completed;
- The number of site visits for technical assistance;
- Number of training sessions given;
- The number of public water systems impacted by training sessions; and
- Number of Enhanced Sanitary Surveys completed.

Element E: Identifying Interested Persons

Section 4120(c)(2)(E) of the SDWA states Nevada must consider *"an identification of the persons that have an interest in and are involved in the development and implementation of the capacity development strategy. "*

Finally, the last item BHPS must consider in developing a capacity development program is public participation. Public participation is an integral part of the process to identify people that have an interest in the development of a program. Collectively, the CDSG was formed from Federal, State, and local governments, private and public PWS's, PWS customers, as well as drinking water organizations and associations.

In order to elicit additional information, a second combined Public Workshop/Strategy Input Session was held to present the draft capacity development plan and to obtain comments.

(III)

Strategy

The BHPS must describe how the selected elements, when taken as a whole, can be rationally considered to constitute a strategy to assist PWS in acquiring and maintaining technical, managerial and financial capacity.

The BHPS considered the five elements above, and all of the elements will be integrated to form a comprehensive capacity development strategy.

- § 1420(c)(2)(E) *Stakeholder Involvement* - **Procedures to identify interested persons.** An identification of the persons that have an interest in and are involved in the development and implementation of the capacity development strategy (including all appropriate agencies of Federal, State, and local governments, private and nonprofit PWS and PWS customers).
- § 1420(c)(2)(A) *Prioritization Matrix* - **Methods or criteria to prioritize systems.** The methods or criteria that the State will use to identify and prioritize the PWS most in need of improving technical, managerial, and financial capacity.
- §1420(cX2)(B) *Input Session 2* - **Factors that encourage or impair capacity development.** A description of the institutional, regulatory, financial, tax, or legal factors at the Federal, State, or local level that encourage or impair capacity development.
- §1420(cX2)(C) *Input Session 3* - **How the State will use the authority and resources of the SDWA.** A description of how the State will use the authorities and resources of this title or other means to assist public water systems in complying with National Primary Drinking Water Regulations (NPDWR); encourage the development of partnerships between public water systems to enhance the technical, managerial, and financial capacity of the systems; and assist public water systems in the training and certification of operators.
- § 1420(c)(2)(D) *Existing tools vs. tools to develop* - **How the State will establish the baseline and measure improvements.** A description of how the State will establish a baseline and measure improvements in capacity with respect to NPDWR and State drinking water law.

(IV) Implementation

Nevada must describe the State's current efforts for its strategy and its future plans for strategy implementation.

By establishing a process for prioritizing water systems, BHPS will be able to reach those systems most in need of capacity assistance. The matrix system will rank water systems using technical, managerial, and financial indicators. A review of the survey and/or worksheets will indicate what type of assistance the water system most needs (i.e. technical, managerial, financial). A technical assistance provider will then be called in, if necessary, to assist the water system.

- *It is anticipated that BHPS will schedule regular meetings with technical assistance providers to discuss what water systems are in need of assistance and what type of assistance should be provided.*

A number of tools will be available to help water systems after the initial evaluation.

Once the assistance is complete, it will be necessary to follow-up with the system at a later date to determine if the assistance was effective. BHPS will also be measuring improvement of the entire capacity program by evaluating SNC lists, operator certification and by tracking the volume of capacity activity.

The entire process is illustrated in the steps below:

1. Data Collection / Establish Baseline
2. Sanitary Survey / Technical Assistance Providers
3. Evaluate PWS Information and Rank Using Nevada's Matrix System
4. Determine "Type" of Assistance Needed
5. Provide Assistance
 - ⇒ Planning Manual
 - ⇒ T, M, F Training - Public Education
 - ⇒ DWSRF Set-Aside
 - ⇒ Board Training
6. Follow-up
7. Track Success and Reevaluate

Once stakeholders have reviewed the draft capacity development document and all comments are addressed, the document will be finalized and sent to EPA Region IX for review and approval. BHPS views the capacity development strategy for existing water systems as a "living" program. BHPS will be able to evaluate what is working and what is not and make adjustments that will continuously improve the program.

(V)

Future Consideration

Every three years, Nevada must submit to the EPA Administrator a list of community water systems (CWS) and non-transient non-community water (NTNC) systems that have a history of significant noncompliance and the reasons for noncompliance.

By August 6, 2001, Nevada must submit to the EPA Administrator a report on the success of enforcement mechanisms and initial capacity development efforts in helping systems in significant noncompliance achieve and maintain capacity.

Finally, not later than two years after the date on which Nevada first adopts a capacity development strategy, and every 3 years thereafter, Nevada's primacy agency shall submit to the Governor a report on the efficacy of the strategy and progress toward improving the capacity of public water systems in the State.

This section is from EPA's *Guidance on Implementing the Capacity Development Provisions of the Safe Drinking Water Act Amendments of 1996*.

- Each year, as a stand-alone submittal or as part of the capitalization grant application, Nevada will provide documentation showing the ongoing implementation of the capacity development strategy.
- Every three years, Nevada must submit to EPA a list of CWSs and NTNCs that have a history of noncompliance and the reasons for their noncompliance. The next list will be due August 6, 2000.
- By August 6, 2001, Nevada must report to EPA on the success of its enforcement mechanisms and initial capacity development efforts in helping CWS and NTNC having a history of significant noncompliance improve their capacity.
- Not later than two years after Nevada adopts a capacity development strategy, and every three years thereafter, BHPS must submit a report to the Governor on the efficacy of the strategy and progress made toward improving the technical, managerial, and financial capacity of PWS in Nevada. The report shall also be made available to the public.

Failure to produce any of the above reports will constitute a basis for DWSRF withholding since these reports, required under sections 1420(b)(3) and (c)(3), are considered part of the capacity development strategy. However, EPA will not base withholding determinations on any type of judgments or inferences drawn from the reports regarding the relative merits or efficacy of Nevada's capacity development strategy. Further, the statute in section 1420(c)(4) explicitly prohibits EPA from reviewing decisions of Nevada regarding any particular PWS as part of a capacity development strategy. Such decisions regarding individual PWS may not serve as a basis for withholding funds.

Appendices

Appendix 1 - First Stakeholder Invitation Letter

November 4, 1999

«Title» «FirstName» «LastName»
«Company»
«Address1»
«Address2»
«City», «State» «PostalCode»

Dear «Title» «LastName»:

RE: Capability Development Strategy Input Session for Public Water Systems

Over the last several months, the Nevada State Health Division, Bureau of Health Protection Services (NSHD), has developed a Capability Development Program for ***new community and non-transient non-community water systems***.

With this ***new*** program in place, the NSHD is now focusing on issues concerning ***existing*** systems. Many drinking water systems in the State of Nevada lack sufficient technical, managerial and financial capacity (or capability) to consistently supply quality water at an affordable price and in conformance with all the requirements of the Safe Drinking Water Act. To address these concerns, the NSHD will be preparing a Capability Development Strategy.

One of the key elements in the preparation of the Capability Development Strategy is the involvement and input of stakeholders in the process. In order to develop an effective strategy, we are inviting you, or a delegate from your organization, to participate as a Stakeholder in this program. Attached is a list of organizations to which this invitation was extended.

We are holding initial input sessions on the following dates:

Monday, November 29

Nevada State Library and Archives
100 N. Stewart Street, Conf. Room B
Carson City, Nevada

Tuesday, November 30

Great Basin College
1500 College Parkway
McMullen Hall, Room 221
Elko, Nevada

Thursday, December 2

Clark County Health District
625 Shadow Lane, Clemens Room
Las Vegas, Nevada

«FirstName» «LastName»
November 4, 1999
Page Two

All three sessions will be held from 9:30 a.m. to 3:30 p.m. and will follow the same agenda, so you may choose the date and location that is most convenient.

The initial input session will follow the general outline presented below:

- Background and Orientation: Discuss capability development as a state and national issue
Goal: Establish a common starting point for discussions
- Small System Problem Characterization: Discuss problems facing small systems in Nevada
Goal: Adopt a common understanding or consensus of the problems
- Goals for a Capability Development Strategy: Gain input from the stakeholders on the goals and priorities for a strategy
Goal: Determine the main goals a strategy should achieve
- Current NSHD Activities and Suggested Additional Activities: Discuss the activities related to capability development NSHD currently conducts and additional activities the stakeholders feel should be added to the strategy
Goal: Provide input to the NSHD for additional activities to assist small systems

Based on the input sessions and additional information gathered, a comprehensive capability development strategy will be prepared. Following the completion of a draft strategy, you will be invited to attend another input session to comment on this draft.

Your involvement in this process is critical to forming a comprehensive, acceptable, and implementable capability development strategy. We look forward to seeing you at any of the input sessions. If you have any questions, I can be contacted at (775) 687-4750, extension 227. **Please RSVP by Friday, November 19** by contacting me by phone or FAX (775) 687-3218.

Sincerely,

Clifford M. Lawson
Capability Development Program
Drinking Water State Revolving Fund Program
Bureau of Health Protection Services

CML:jaf

Invitations have been issued to the following:

Beatty Water and Sanitation District	James Weeks
Fernley Utilities	Kurt Kramer
Boulder City Water Company	Phil Henry
Carlin Utilities	Jim Aiazzi
Carson City Water Department	Tom Hoffert
Central Nevada Utilities	Mike Johnson
City of Elko	Ferron Konakis
City of Fallon	Larry White
Clark County Health District	Bill Lynn
Community Development Block Grant	Mike Tancheck
Nevada Division of Water Planning	Randy Pahl
Douglas County	Carl Rushmeyer
Ely Municipal Water Dept.	Jerold Stegeman
Gardnerville Ranchos G.I.D.	Bob Spellberg
Glenbrook Homeowners Association	Cameron McKay
Goldfield Water Company	Mike Anderson
City of Henderson Water System	Kirt Segler
Incline Village G.I.D.	Mike Workman
Lander County Sewer and Water District #2	Ray Williams
Las Vegas Valley Water District	Linda Blish
Lyon County Utilities	Jim Lovato
Virgin Valley Water District	Mike Winter
Moapa Valley Water District	Van Robinson
Nevada Association of Counties	Bob Hadfield
Nevada Department of Environmental Protection	Leo Drosdoff
Nevada League of Cities	Tom Grady
Nevada Rural Water Association	Steve Porter
North Las Vegas Utilities	Ken Albright
Hafen and Hafen Realty Co.	Tim Hafen
Public Utilities Commission	Craig Steele
Rural Community Assistance Corporation	Phil Walsack
Sierra Pacific Power	Mark Foree
Silver Springs Water Company	Don Allen
Southern Nevada Water System	Ron Zegers
Spring Creek Utilities	Ryan Limberg
Sun Valley Water and Sanitation District	Darrin Price
Tonopah Water System	Bob Sorensen
Town of Pahrump	Peggy Warner
USDA Rural Utility Services	Mike Holm
Washoe County Health District	Fritz Steppat
Washoe County Dept. of Water Resources	Terri Svetich
Water Wastewater Education and Training Coalition	Marcellus Jones
West Wendover Water System	Keith Durham
City of Winnemucca	Steve West
U.S. EPA, Region 9	Michelle Moustakas
Tri-State Water Operations, Inc.	Bob Loding
Shaw Engineering	John Shaw
Lumos and Associates	Craig Wesner
ECO:LOGIC	John Enloe
Waterresources Consulting Engineers, Inc.	George Ball

Appendix 2 - Attendance List (Stakeholder Workshop)

NOVEMBER 29, 1999 - CARSON CITY, NEVADA

Name	Address, City, Zip Code	Phone No.	Affiliation
Phil Walsack	777 E. Williams, Carson City 89701	882-8887	Rural Comm Assistance Corp
Roger Roepke	5401 Longley #15, Reno	827-6111	Lumos and Associates
John Enloe	6490 S. McCarran Blvd. #C25, Reno 89509	827-2311	EcoLogic Engineering
Fritz Steppat	Washoe Co District Health, Reno	328-2432	
Diana Langs	5000 Sun Valley, Sun Valley 89433	673-2220	Sun Valley GID
Darrin R. Price	5000 Sun Valley, Sun Valley 89433	673-2253	Sun Valley GID
Charles Lawson	1801 Hwy 50 E., Carson City 89701	884-2055	Nevada Rural Water Assn.
Don Allen	P.O Box 285, Silver Springs 89429	577-2223	Silver Springs Mutual Water
Brian Randall	340 N. Minnesota St., Carson City 89703	883-1600	Resource Concepts, Inc.(Town of Minden; G'ville Water)
Michelle Moustakas	WTR-6, 75 Hawthorne St., San Francisco, CA 94105	415-744-1859	EPA
Jon Palm	1179 Fairview Dr., Carson City 89710	687-4754x229	Nevada State Health Division
Craig Steele	1150 E. William St., CC 89701	687-6046	Nevada Public Utilities Comm.
Mike Holm	1390 Curry St., Carson City 89703	887-1222	USDA-Rural Development
Cheryl Couch	1390 Curry St., Carson City 89703	887-1222	USDA-Rural Development
Mike Workman	1220 Sweetwater Rd., Incline Village 89451	832-1223	Incline Village GID
Terri Svetich	4930 Energy Way, Reno 89502	954-4649	Washoe Co Dept of Water Res
Bob Loding	P.O. Box 11970, Zephyr Cove 89448	588-7245	Tri-State Water Operations Inc

NOVEMBER 30, 1999 - ELKO, NEVADA

Name	Address, City, Zip Code	Phone No.	Affiliation
Larry Hall	P.O. Box 2825, W. Wendover 89883	664-2593	West Wendover City
Leasa Hermansen	1755 College Ave., Elko 89801	777-7210	City of Elko
Lynn Forsberg	155 S. 9 th Street, Elko 89801	738-6816	Elko County

DECEMBER 2, 1999 - LAS VEGAS, NEVADA

Name	Address, City, Zip Code	Phone No.	Affiliation
Kirk Medina	240 Water Street, Henderson 89015	702-565-0616	City of Henderson
Valerie Schulte	1001 S. Valley View Blvd., LV 89153	702-258-3952	LVVWD
Andy Belanges	1001 S. Valley View Blvd., LV 89153	702-258-7280	SNWA
David R. MacFaviane	5750 Sheila Ave., LV 89108	702-645-6863	Hillcrest Manor Water Users Assn.
Mike Winters	500 Riverside, Mesquite 89024	702-346-5731	Virgin Valley Water District
Bill Lynn	625 Shadow Lane, LV 89127	702-383-1261	Clark Co. Health District
Stuart Powell	1801 Hwy 50 E, St. K, CC 89701	642-1568	Nevada Rural Water Assn.
James Weeks	Box 99, Beatty 89003	553-2931	Beatty Water and Sanitation
Ron Zegers	1001 S. Valley View Blvd., LV 89153	702-567-2001	SNWA

All cities are in Nevada unless otherwise noted and all area codes are 775 unless otherwise noted.

Appendix 3 – Initial Summary Report

**CAPABILITY DEVELOPMENT STRATEGY STAKEHOLDER INPUT
SESSIONS**

**FOR
NEVADA BUREAU OF HEALTH PROTECTION SERVICES**

**Carson City
November 29, 1999**

**Elko
November 30, 1999**

**Las Vegas
December 2, 1999**

**Facilitated by:
University of New Mexico Environmental Finance Center**

Summary Report

This report summarizes the key findings from the initial Stakeholder Input Sessions for Nevada's Capability Development Strategy held in three cities in Nevada: Carson City, Elko, and Las Vegas on November 29 and 30, and December 2, 1999. The Input Sessions were sponsored by Nevada's Bureau of Health Protection Services (BHPS) and were facilitated by the University of New Mexico Environmental Finance Center (EFC). The EFC would like to thank all of the participants for their willingness to share ideas, for their openness during the input sessions, and for their time and energy. Participant input is crucial in the successful development of the BHPS Capability Development Strategy.

The purpose of these meetings was to gather information and insight from various groups and individuals who have an interest or "stake" in water systems so that their input can be considered, and where possible or appropriate, incorporated into the Capability Development Strategy. Several types of representative groups were invited to attend the session, such as: associations, system operators, local governments, other state governments, federal agencies, and assistance providers. A list of invitees to the input sessions and a list of actual attendees are attached to the end of this report along with a copy of the letter inviting the participants.

The Stakeholder Input Sessions followed the agenda below.

Agenda

Welcome and Introduction

SDWA Requirements for Capability Development Strategy

Small System Problem Characterization in Nevada

Impairments and Enhancements to Capability Development

Nevada's Current Activities in Capability Development w/ Discussion of Additional Activities or Revised Activities that Nevada Should Include in a Strategy

Priorities and Goals for a Strategy

The first session was a lecture style format to discuss the requirements of a strategy and to provide all attendees with a common starting point and a common understanding of the strategy process. All other topics were input sessions. Each input session was preceded by a very brief introduction to the topic and then attendees were asked to brainstorm ideas related to the topic. In Carson City, the attendees were divided into smaller groups of approximately 5 people each. The groups recorded all ideas on a flip chart. The small groups were then asked to come to a consensus, within the group, on which items were the most important. Those top two to four ideas were then reported out to the entire group. In Elko and Las Vegas, the attendance was not large enough to split the group into smaller groups, so the input sessions were done in one large group but the general format was the same.

The input gathered from the stakeholders for each topic is presented below.

Brief Background on the Capability Development Strategy Process

The 1996 (SDWA) amendments included requirements that the state must develop a Capability Development Strategy for existing public water supply systems. (Note: the specific language in SDWA refers to a Capability Development Strategy; however, Nevada has adopted the name Capability Development Strategy and this terminology will be used hereafter in this text.) In this context, capability development is having the technical, managerial, and financial capabilities to operate over the long term in compliance with all state and federal regulations while providing safe, reliable, quality water at an affordable price. Capability development is meant to be a process of continual improvement, not a single point in time and an individual system's capability falls along a continuum of capability. All systems can improve their capability and no system is defined as "non-viable" under this concept.

To assist systems in improving their technical, managerial, and financial capabilities, states must develop a Capability Development Strategy or plan to indicate how they will provide assistance. The five elements that must be considered, include:

- Method of prioritizing systems most in need of technical, managerial, and financial improvements
- Identification of factors that impair or enhance capability within the state
- Determination of how the state will use its resources and authorities to: assist systems in complying with regulations, encourage systems to form partnerships, and assist systems with the training and certification of operators
- Development of a means of establishing a baseline and measuring improvements in system capability
- Identification and involvement of individuals interested in the strategy process

The state must develop and implement a capability development strategy or it risks losing a portion of the money allocated for the State Revolving Fund, set up to pay for system improvements. EPA does not have any mandates on the actual content of the plan; the state is free to develop a plan that will best meet the needs of the water systems in the state. However, the state must consider input from stakeholders to ensure that the strategy does meet the needs of the systems.

State strategies are meant to be “living” documents meaning that they are not just to be developed and put on a shelf. The initial strategy should be thought of as a starting point only. The plan outlined in the strategy should be implemented, measured, reviewed and revised as the state moves forward. Two years after the enactment of the strategy and every three years after that, the states must report on the progress of the strategy. This reporting process will help ensure that the state is continually evaluating and revising its strategy.

Input Session 1: Small System Problem Characterization in Nevada

In this session, attendees were asked to think about the wide variety of problems faced by systems. They were asked to brainstorm problems that systems face, particularly small systems, and then to decide which problems were the most critical. The intent of this session was to focus attendees on the issues facing water systems and to demonstrate the need for some assistance under a Capability Development Program. This session was also intended to demonstrate the extent to which the group was in agreement regarding problems facing systems.

The following problems were indicated to be high priority issues with water systems:

- Raising the level of professionalism
- Boards and operators
- Regionalization of resources
- Operator certification (enforcement not strong)
- Rate setting (paying for the full cost of water)
- Dealing with politics
- Money issues - cost of treating, money availability, funding
- Regulation knowledge, board training
- Planning - source-water, wellhead, emergency
- Aging infrastructure

Between the three meetings, there were many other problems discussed. Those items are listed in Attachment 1 to this document.

Input Session 2: Impairments and Enhancements to Capability Development

In this session, attendees were asked to think about those factors within the State of Nevada that impair systems from achieving adequate capacity and those factors that help systems achieve adequate capacity. Attendees were asked to think very broadly about the factors that impair or enhance capacity, including institutional, regulatory, financial, tax, or legal factors at the federal, state or local level. They were told to think about all state agencies, not just BHPS. The attendees were asked to brainstorm the impairments and enhancements and then to choose the two or three most critical impairments and the most important enhancements. The intent of this exercise is to give BHPS an indication of the types of impairments that the strategy should try to address and the enhancements that the Capability Strategy should build upon. Highlighted below are the most critical impairments and the most important enhancements from the three meetings.

Most Critical Impairments:

- Lack of economy of scale
- Lack of planning (rates, future needs)
- Inadequately trained boards and staff
- Distrust of government (lack of public education)
- Regulations, public utilities commission red tape
- Lack of diversification
- Radon and arsenic standards
- Large disparity in incomes in rural areas
- Resort economy
- Cost of compliance
- Poor master planning (emphasis on short term vs. long term)
- Geographical location impairs regionalization
- Northern regions have difficulty in receiving reciprocity from Nevada for training in Utah (closer to go to Utah)
- Lack of more than one certification program
- Need national certification process
- Would open up higher possibilities
- Testing and analysis costs
- Funding to meet new regulations

Most Critical Enhancements:

- Good technical support
- State agency people are accessible
 - Can call someone and they will call back and work with you
 - Easy and good to work with
 - People will back up the public water system
 - People will stick by what they tell system
- Availability of money
- # of technical assistance providers
- Abundance of money available (until the arsenic rule)

- Nevada water and wastewater training coalition
- Economic diversification
- Consumer confidence reports
- Operator certification new requirements
- Good master planning

In the case of the enhancements, it should be noted that the accessibility of BHPS staff and the working relationship with the staff was noted as an enhancement at all three locations. Clearly, this factor is significant within the state and something for the Capability Strategy to build upon. Between the three meetings, there were many other impairments and enhancements discussed. Those items are listed in Attachment 2 to this document.

Input Session 3: Additional Programs or Activities to Assist Systems

In this session, it was explained that although developing a capability strategy is a new requirement under the 1996 SDWA amendments, the provision of services to help systems comply with regulations is not new. The Nevada BHPS has many programs already in place to assist systems, such as: sanitary surveys, CCRs, operator certification and training, State Revolving Fund, plan review of new or upgraded systems, enforcement, assistance provision through own staff and through contracted assistance providers. In addition, attendees were presented with descriptions of programs that some of the other states provide to give examples of the wide variety of activities that states are doing and to explore the options for Nevada. Specifically, examples were given of programs in GA, PA, AR, NM, LA, TX, and MS. Attendees were asked to think about the current activities that Nevada already has and whether those activities should be expanded, revised or modified in any way. Attendees were then asked to think about the impairments and enhancements to capability that they previously discussed to see if additional programs were necessary to try to address some of the impairments and build upon the enhancements. The discussion of the additional programs from other states was intended to help attendees think creatively about the types of additional programs Nevada should add as part of its strategy. The attendees were told to brainstorm programs that they would like to see the state add under the capability strategy process. Then attendees were told that realistically, the state can only develop a few additional items as part of the strategy process due to personnel and money constraints. Therefore, if the items on the brainstormed list had to be viewed in that context, which items would be the most critical for systems. The attendees were asked to pick the top two or three programs from the list.

The intent of this session was to provide some input to the BHPS on various ideas for programs or activities that should be examined for possible inclusion within the capability strategy, either now or at some point in the future. The list of all possible activities is quite lengthy and is included in Attachment 3. This attachment shows the ideas broken down into various categories. The highest priority programs or activities are listed below. Some of these ideas represent new programs or activities while others are modifications to existing programs.

- Public Utilities Commission (PUC) encourages success by allowing reasonable rate of return
- Selective enforcement – PUC rates and drinking water issues.
- Creative carrot / club for operator certification
- Board Training tied to loans / grant funds (all sources)
- Mandatory meeting for funders
- Mobile Home Park – What to do?
- Water User Association and Co-operatives – Need targeted assistance

- Standardized approach to systems by Bureau of Health Protection Services
- State to act as advocate for systems in regulations; should work with other groups such as ASDWA, NRW, RCAC as well
- Allow alternative methods of rate making: be creative
- Requiring business plans – Use Small Business Division Center
- Training opportunities need to be expanded
 - Network and leverage training resources
 - Mentor programs
 - Train the trainer programs
- Coordination of assistance
- Mandatory management certification for system wanting funding
- Educational opportunities
- Substitute operator program
 - to fill in – part of shared resources
- Guidebook on:
 - What requirements need to be done
 - Who to go to
 - What forms to complete
 - Matrix of requirements
 - Mail to consulting engineers, cities, and counties
- Paying for sampling

Input Session 4: Goals and Priorities for a Capability Strategy

In this session, attendees were asked to think about what they hoped to achieve with a Capability Strategy. They were asked to think about the report to the Governor in two years and what they hoped the strategy would have achieved. The stakeholders were then asked to list the goals they have for the strategy.

The following goals were identified during the three meetings. The goals have been categorized. This list includes all of the goals; it was not prioritized as part of the meetings.

Training/Education

Training readily available; more options; in area where systems are located
 More training opportunities
 Board training
 Boards and Management fully informed about operating systems

Regionalization/Partnerships

Systems networked together – Share resources and knowledge
 10 Regional Water providers (10 formed within the State)

Overall Capacity Improvements

Safe water in every tap
 95% of systems have Business Plans
 95% of systems have majority of Boards trained
 95% of systems have Capital Improvement Plan for infrastructure improvements
 95% of systems have rates recovering full cost of operation

Percentage increase of water systems meeting full regulatory compliance and achieving financial viability
Boards require full cost reimbursement to achieve technical, managerial and financial viability
100% have certified operators at required level
All water systems could comply with water quality regulations
All water systems have a better educated operations and maintenance staff

Consumer

Improved public knowledge and interest in operation of public water systems; agree to rate that includes full cost of service.
More knowledgeable media
Public information available

Regulatory

Consistent regulatory requirements (for all sizes and shapes)
Provide system information
 Regulated community packets
 Streamlining the process
State would supply comprehensive guide so all systems are aware of regulations and what they need to do
 Makes systems more aware of what they need to do
 Need plain English version
 Tailor the instructions
Recognition of Nevada as an independent state not tied to California
 Particularly true with AWWA
Get a mobile trailer (for training, testing, or other uses)
Take the hassle out of paperwork
Streamline and simplify all processes for small systems

Individual System TMF Improvements

Small systems – Know that budget and rates are now and in 5 years; infrastructure improvements – done for what reason
Sufficient infrastructure so that they can grow if they want (Water does not stop growth)
Deliver best quality water for the least amount of money
 Maximize cost efficiency

Next Steps

Following the three input sessions the BHPS met to review and discuss the input provided at the sessions. This meeting occurred in late February. The BHPS is developing a draft strategy using some of the input provided by stakeholders. The strategy will be presented for input and finalized for submission to EPA for approval prior to the August 6, 2000 deadline. The strategy will be periodically reviewed and modified as needed.

Attachment 1 – Small System Problem Characterization

Input Session 1 - Small System Problem Characterization in Nevada

Additional Problems Discussed During Stakeholder Meetings

System Specific Problems

Technical

Aging Infrastructure
Storage Capacity
Regulation – knowledge
Treatment – water quality
Certified operator
Operation and maintenance
Lack of understanding of why some regulations have been developed
How do small systems deal with breaks

Managerial

Operator Training
Inadequate Board training
Water Quality (treatment) Understanding
Regionalization (maybe county) – management of multiple systems
Sharing of professional staff members
Long term planning (5+ years)
Utility management skills
Raise level of professionalism
Operator education / training
Board of Directors education / training
Staffing
 Qualified
 Board of Directors / Manager
Staff lack of motivation
 Operator
 Board of directors
Regulation – knowledge
Inadequate planning
 Capital improvement planning
 Finance
 Emergency
 Well head protection
 Source water treatment
Management turnover

Training

- Travel to training is expensive
- Not good locations for small, rural areas
- Lack of understanding of why some water system tests are done
- Lack of understanding of why some regulations have been developed
- How do small systems deal with the need to do boil water notices
- Getting people involved in the running of the water company
- Getting and keeping certified operators
- Are small systems aware of regulatory requirements?
- Issues with fixed boundaries / not for profit

Financial

Financing

- Limited growth to pay for new systems
- Rates (insufficient to support systems)
- Investment in Aging Systems
 - Not just repair
 - Capital projects
- Water quality (SDWA) and its effect on rates
- Lack of pay for rural systems/operators
- Give financial assistance to systems with technical, managerial, and financial capability
- Rate setting
 - Skills
 - Political
 - Affordability of staff
- Cost of monitoring / compliance
- User rate – too low / too high
- Lack of funds compounds all of the other problems
 - For example, if there is no money for fixing pipe – how do you afford training?
- Small systems may have a very high bill but it is still barely able to meet operating expenses
 - Can not afford an operator or training so the county has to foot the bill
- Cost of business too high
- Funding for capital improvements
 - Always playing catch-up with growth
 - Strings attached to funding

Sampling and Analysis

- Cost of testing is a problem – too expensive
 - Increasing lab fees passed on to public water systems
- Lack of overnight express delivery service for samples
 - Fed Ex may take 48 hours for overnight
 - Greyhound may be used
 - Possibly have to drive samples across the state to reach a lab
- Labs (small, local labs) being driven out of business
- Communication issues with trying to coordinate sampling runs
- No or unreliable phone line
- Sampling and Analysis Costs

Externally Caused Problems

Declining population
Size of system
Geography
Lack of public education in what is necessary
Not enough market
Population growth and trying to keep up with it

Problems Related to Regulation

Inter and Intrastate agency communication and consistency
Consistency among regulators
Water quality (SDWA) and its effect on rates
Cost of monitoring / compliance
Regulation – knowledge
Should look at reciprocity between other states
 Cross-connection Control training in Idaho or Utah should be acceptable
Too many regulations
Lack of waivers for some of the other contaminants
 Constituents sometimes have never been documented in the area
Agency coordination is lacking
 Need agency matrix with requirements
Some cross-connection control / backflow procedures do not work for Northern Nevada climates
 Sub-freezing temperatures
 Sometimes conflicting regulations
How to figure out who to go to for:
 Assistance
 Requirements
 Problems
 Frustrations with submittals
 And fulfilling requirements
Confusion about testing and certification for becoming certified operators
 Need more help with this process
 Need more guidance
Meeting environmental regulations
 Such as NEPA, endangered species
 Format required for compliance
Are small systems aware of regulatory requirements?
Future regulations (As)

Attachment 2 - Impairments and Enhancements

Input Session 2: Impairments and Enhancements to Capability Development

Below is a list of all items listed at the Input Sessions

Impairments

Most Critical Impairments:

- Lack of economy of scale
- Lack of planning (rates, future needs)
- Inadequately trained boards and staff
- Distrust of government (lack of public education)
- Regulations, public utilities commission red tape
- Lack of diversification
- Radon and arsenic standards
- Large disparity in incomes in rural areas
- Resort economy
- Cost of compliance
- Poor master planning (emphasis on short term vs. long term)
- Geographical location impairs regionalization
- Northern regions can't get training reciprocity from Nevada for training in Utah (closer to go to Utah)
- Lack of more than one certification program
 - Need national certification process
 - Would open up higher possibilities
- Testing and analysis costs
- Funding to meet new regulations

Additional Impairments:

- State does not fund its own programs
- State passing costs onto consumers that it use to pay
- Communities are faced with higher fees for other issues / programs that could impact ability to pay for water
- Not aware of the Nevada Training Coalition (NTC) and Infrastructure for Nevada Communities (INC)
 - Lack of knowledge about what's available
- Inability to repay loans
 - Rates already to high to take on debt service
- Mailing are not always received or sent to the right people
- Operator availability / retention related to work in mines
 - When mines hire – operators may leave to work for the mine

- How to educate the public
 - Consumer Confidence reports may not be doing the job
- Regulations may not be flexible enough for small systems
- Can regulations say “where practical”
 - Possibly based on number of connections for some regulations
- **Regulations may be too costly for some small systems**
- Conflicts within regulations
 - Review for new systems could be simpler
- One standard for all 50 states may not be reasonable
 - Example: As, VOC's, SOC's
- Lack of agency communication / interaction
- Environmental issues / red tape with doing new wells / expansions / improvements
- Lack of public information
- State not advocating for systems with federal regulations
- EPA one size fits all approach
- Unreasonable regulations
- Distance between systems
- Number of small systems
- Lack of education opportunity
- Many new regulations
- Geographic location of public water systems
- Politics / cooperation among public water systems
- Demographic – fixed income
- Regulatory environment does not encourage profitability
- Short term cost impact vs. long term – poor master planning

Enhancements

Most Important Enhancements:

- Good technical support
- State agency people are accessible
 - Can call someone and they will call back and work with you
 - Easy and good to work with
 - People will back up the public water system
- **People will stick by what they tell system**
- Availability of money
- # of technical assistance providers
- Abundance of money available (until the arsenic rule)
- Nevada water and wastewater training coalition
- Economic diversification
- Consumer confidence reports
- Operator certification new requirements
- Good master planning

Additional Enhancements:

- **BHPS responsive and easy to talk to; return phone calls**
- Bringing in school children for tours of treatment facilities
 - Models of aquifers for schools
- Assistance providers
- Unofficial network of systems to try and collect and analyze samples
 - Maybe there is a role for the state here – possibly they could do (or facilitate) an emergency plan for counties or groups
- State working through City and County to host meetings and share information
 - Would work better in small communities and rural areas
- County proctoring water operator certification tests
- Switching to a new testing process (ABC membership)
- Consumer confidence reports
 - Helps with misinformation
- Training
- Generally good water quality
- Utilize boom cycle to support bust cycle
- Regulation
- Apply pressure to improve
- Public and officials education
- Capacity development – Technical, managerial and financial
- Drinking Water State Revolving Fund (DWSRF) / RVS / AB 198 – Funding
- Nevada Water and Wastewater Training Coalition
- Infrastructure for Nevada Communities (INC)
- Ground water systems
- Funding depreciation – if regulated by agencies
- Message to public about what it costs to run a system
- Customer buyin / support
- Regulatory forced
- Education / training – lower operating costs
- Share technical consultants
- Combine small systems
- New public water system capacity requirements
- Source water protection
- Public participation / education

Attachment 3 - Capability Development Programs

Input Session 3: Capability Development Programs

Below is a list of all items Suggested at the Input Sessions

Highest Priority Items

- Public Utilities Commission (PUC) encourages success by allowing reasonable rate of return
- Selective enforcement – PUC rates and drinking water health issues.
- Creative carrot / club for operator certification
- Board Training tied to loans / grant funds (all sources)
- Mandatory meeting for funders
- Mobile Home Park – What to do?
- Water User Association and Co-operatives – Need targeted assistance
- Standardized approach to systems by Bureau of Health Protection Services
- State to act as advocate for systems in regulations; should work with other groups such as ASDWA, NRWA, RCAC as well
- Allow alternative methods of rate making: be creative
- Requiring business plans – Use Small Business Division Center
- Training opportunities need to be expanded
 - Network and leverage training resources
 - Mentor programs
 - Train the trainer programs
- Coordination of assistance
- Mandatory management certification for system wanting funding
- Educational opportunities
- Substitute operator program
 - While operators are away – get others to fill in – part of shared resources
- Guidebook on:
 - What requirements need to be done
 - Who to go to
 - What forms to complete
 - Matrix of requirements
 - Mail to consulting engineers, cities, and counties
- Paying for sampling
 - State sends bottles for samples and pays cost of analysis

Additional Ideas from the Input Sessions:

Training and Technical Assistance

- Board training
 - Does not have to be mandatory (probably should not be)
 - Carrot for funding
 - Peer system may work best
 - Individualized training
 - Local
 - Across the board / all systems
- Mandatory education for Boards and Managers
- Make water systems aware of technical assistance contracts
 - Make sure systems know that Nevada Rural Water Association can help all systems not just “rural” systems
- More comprehensive assistance with technical, managerial, and finance for small systems
- Certified Operator Training
- Customer training
 - Educate customers on all aspects of water system operations
 - School programs
- Technical assistance provision
 - Content in contracts
- Management certification / training program (mandatory)
- Outreach program / incentive program
- More organized means more training
- Increased cooperation between technical assistance providers

Funding

- More advertising of DWSRF eligibility so small systems can apply
- More one-on-one funding assistance
- More tailored assistance with funding
- Review problems with getting money
- Moving to small systems / getting funding for system
- How to get funding to small systems
- Look at other sources of revenue
 - “connection” tax (per meter or tap charge)
 - subsidize small systems
- Funding
 - Coordination of financial services
 - Standardized application forms
 - Standardized / or eliminate cross cutter requirements (NEPA, Davis-Bacon, MBE, WBE)
- Forgiveness of principal
 - More grant money
- Standardized Bureau of Health Protection Services approach to financials
- Funding requirements / red tape relaxed
 - AB198 / DWSRF
 - Application assistance
 - Changes to requirements
- Increased cooperation between funders

Self-Help/Peer Assistance

- Co-ops and Networks of systems
- Peer instructional program
 - Local people providing programs
 - Working through colleges and universities
 - Training has to be worthwhile
 - Offer some type of certificate / “degree”
 - Train the trainer programs
- Peer group for rate analysis

Regulatory Assistance

- State should be proactive with backflow prevention
 - Mobile lab on wheels
 - Could link the lab to the peer program
- State “audit” of systems
 - One-on-one meeting with system
 - Could be done by a technical assistance provider / contractor
- Outreach program / incentive program
- Variations in regulations for small communities
 - Opposite view –that they should not be different – was also expressed
 - Alternatively cost relief for small systems
- Clearinghouse for basic water quality data
- Getting regulations / requirements to small systems
 - Mailings – get a list of water systems from state engineers office
- Emphasize efforts on Nevada Revised Statutes (NRS) 81 and 82 (Non-Profit Cooperative Associations and Non-Profit Corporations)
- More comprehensive Sanitary Survey
 - Include managerial and financial aspects of Capacity Development
- “Selective enforcement” plan
- Why do big systems have to comply while enforcement is lackadaisical, “lax”, not the same for all systems?

Sampling and Analysis

- May want to send water quality information to non-regulated systems (less than 15 connections) to let them know about meeting water quality data
- Sampling / analysis assistance
 - Could it be voluntary?
 - What would it cost by region
 - What would it cost by size

Other

- Entire small water systems to cooperate / consolidate
- Get functional Boards
- What is up with Mobile Home Parks
- Apply regulatory hammer
- Get “association” to provide service
- Encourage management consolidation

- Require consolidation

**CAPACITY DEVELOPMENT STRATEGY STAKEHOLDER WORKSHOP
NOVEMBER 29, 1999 IN CARSON CITY, NEVADA
ATTENDANCE LIST**

Name	Affiliation
Phil Walsack	Rural Comm Assistance Corp
Roger Roepke	Lumos and Associates
John Enloe	Eco:Logic Engineering
Fritz Steppat	Washoe County
Diana Langs	Sun Valley GID
Darrin R. Price	Sun Valley GID
Charles Lawson	Nevada Rural Water Assn.
Don Allen	Silver Springs Mutual Water
Brian Randall	Resource Concepts, Inc.(Town of Minden; G'ville Water)
Michelle Moustakas	EPA
Jon Palm	Nevada State Health Division
Craig Steele	Nevada Public Utilities Comm.
Mike Holm	USDA-Rural Development
Cheryl Couch	USDA-Rural Development
Mike Workman	Incline Village GID
Terri Svetich	Washoe Co Dept of Water Res
Bob Loding	Tri-State Water Operations Inc

**CAPACITY DEVELOPMENT STRATEGY STAKEHOLDER WORKSHOP
NOVEMBER 30, 1999 IN ELKO, NEVADA
ATTENDANCE LIST**

Name	Affiliation
Larry Hall	West Wendover City
Leasa Hermansen	City of Elko
Lynn Forsberg	Elko County

**CAPACITY DEVELOPMENT STRATEGY STAKEHOLDER WORKSHOP
DECEMBER 2, 1999 IN LAS VEGAS, NEVADA
ATTENDANCE LIST**

Name	Affiliation
Kirk Medina	City of Henderson
Valerie Schulte	LVVWD
Andy Belanges	SNWA
David R. MacFaviane	Hillcrest Manor Water Users Assn.
Mike Winters	Virgin Valley Water District
Bill Lynn	Clark Co. Health District
Stuart Powell	Nevada Rural Water Assn.
James Weeks	Beatty Water and Sanitation
Ron Zegers	SNWA

Appendix 4 – Second Stakeholder Invitation

June 15, 2000

«Title» «FirstName» «LastName»
«Company»
«Address1»
«Address2»
«City», «State» «PostalCode»

Dear «Title» «LastName»:

RE: Draft Capability Development Strategy Review

As you know, the Nevada State Health Division, Bureau of Health Protection Services (NSHD), has been developing a Capability Development Program for ***new community and non-transient non-community water systems***.

With this ***new*** program in place, the NSHD will focus on issues concerning ***existing*** systems. Many drinking water systems in the State of Nevada lack sufficient technical, managerial and financial capacity (or capability) to consistently supply quality water at an affordable price and in conformance with all the requirements of the Safe Drinking Water Act. To address these concerns, the NSHD will present its Draft Capability Development Strategy.

One of the essential elements in the preparation of the Capability Development Strategy is the involvement and input of stakeholders in the process. In order to develop an effective strategy, we are inviting you, or a delegate from your organization, to participate as a Stakeholder in this program. Attached is a list of organizations to which this invitation was extended.

We are holding a review session for Nevada's Capacity Development Strategy on the following date:

June 29, 2000, 9:00 AM
U. S. Geological Survey
333 West Nye Lane, Room 223A
Carson City, NV

«FirstName» «LastName»

June 15, 2000

Page Two

This session will be held from 9:00 a.m. to 12:00 p.m. and follow the general outline presented below:

- ***Methods or criteria to prioritize systems.*** The methods or criteria that the State will use to identify and prioritize the PWS most in need of improving technical, managerial, and financial capacity.
- ***How the State will use the authority and resources of the SDWA.*** A description of how the State will use the authorities and resources of this title or other means to assist PWS in complying with National Primary Drinking Water Regulations (NPDWR), encourage the development of partnerships between PWS to enhance the technical, managerial, and financial capacity of the systems, and assist PWS in the training and certification of operators.
- ***How the State will establish the baseline and measure improvements.*** A description of how the State will establish a baseline and measure improvements in capacity with respect to NPDWR and State drinking water law.
- ***Relevant Comments and Responses.*** Any additional relevant comments received on *the Draft Capacity Development Strategy for Existing Public Water Systems*.

Your involvement in this process is critical to forming a comprehensive, acceptable, and implementable capability development strategy. We look forward to seeing you at the review session. If you have any questions, I can be contacted at (775) 687-4750, extension 227 or by FAX @ (775) 687-3218.

Sincerely,

Clifford M. Lawson
Capability Development Program
Drinking Water State Revolving Fund Program
Bureau of Health Protection Services

CML:jaf

Attachment

Beatty Water and Sanitation District	James Weeks
Boulder City Water Company	Phil Henry
Carlin Utilities	Jim Aiazzi
Carson City Water Department	Tom Hoffert
Central Nevada Utilities	Mike Johnson
City of Elko	Ferron Konakis
City of Elko	Leasa Hermansen
City of Fallon	Larry White
City of Henderson System	Kirk Medina
City of Henderson System	Kirt Segler
City of Winnemucca	Steve West
Clark County District Health Dept.	Bill Lynn
Community Development Block Grant	Mike Tanchek
Douglas County	Carl Rushmeyer
ECO:LOGIC	John Enloe
Elko County	Lynn Forsberg
Ely Municipal Water Department	Jerold Stegeman
Fernley Town Utilities	Kurt Kramer
Gardnerville Ranchos G.I.D.	Bob Spellberg
Glenbrook Homeowners Association	Cameron McKay
Goldfield Water Company	Mike Anderson
Hafen and Hafen Realty Company	Tim Hafen
Hillcrest Manor Water Users Assn.	David MacFaviane
Incline Village G.I.D.	Mike Workman
Lander County Sewer and Water District #2	Ray Williams
Las Vegas Valley Water District	Linda Blish
Las Vegas Valley Water District	Valerie Schulte
Lumos and Associates	Craig Wesner
Lumos and Associates	Roger Roepke
Lyon County Utilities	Jim Lovato
Moapa Valley Water District	Van Robinson
Nevada Association of Counties	Bob Hadfield
Nevada Dept. of Conservation and Natural Resources	Leo Drosdoff
Nevada Dept. of Conservation and Natural Resources	Randy Pahl
Nevada League of Cities	Tom Grady
Nevada Rural Water Assn.	Stuart Powell
Nevada Rural Water Association	Steve Porter
North Las Vegas Utilities	Ken Albright
Public Utilities Commission	Craig Steele
Resource Concepts, Inc.	Brian Randall
Rural Community Assistance Corporation	Phil Walsack
Shaw Engineering	John Shaw
Sierra Pacific Power	Mark Foree
Silver Springs Water Company	Don Allen
Southern Nevada Water Authority	Andy Belanges
Southern Nevada Water System	Ron Zegers
Spring Creek Utilities	Ryan Limberg
Sun Valley GID	Diana Langs
Sun Valley Water and Sanitation District	Darrin Price
Tonopah Water System	Bob Sorensen
Town of Pahrump	Peggy Warner
Tri-State Water Operations, Inc.	Bob Loding
U.S. EPA, Region IX	Michelle Moustakas
USDA – Rural Development	Cheryl Couch
USDA--Rural Utility Services	Mike Holm
Virgin Valley Water District	Mike Winters
Washoe County	Terri Svetich
Washoe County District Health	Fritz Steppat
Water Wastewater Education and Training Coalition	Marcellus Jones
Waterresources Consulting Engineers, Inc.	George Ball
West Wendover City	Larry Hall
West Wendover Water System	Keith Durham

Appendix 5 – Notice of Public Workshops

NOTICE IS HEREBY GIVEN that the Bureau of Health Protection Services, an agency within the State Health Division, Department of Human Resources, will hold a public workshop. The State Health Division will address the Capacity Development Strategy as required by the 1996 amendments to the Safe Drinking Water Act.

Capacity Development Strategy

The Capacity Development Strategy is a required element of the Drinking Water State Revolving Fund (DWSRF). The Capacity Development Strategy for Existing Public Water Systems describes how the Nevada State Health Division, Bureau of Health Protection Services (BHPS) is going to assist existing water systems in acquiring and maintaining technical, managerial, and financial capacity and meeting the requirements detailed in §1420(c) of the Safe Drinking Water Act to ensure that the State receives its full DWSRF allotment. To meet these requirements, Nevada must develop and begin implementing this strategy to assist public water systems in acquiring and maintaining capacity to comply with the Act by August 6, 2000.

These workshops will provide the public with an opportunity to review and comment on the proposed strategy to develop, maintain and improve the technical, managerial and financial capabilities of public water systems.

The proposals for the Capacity Development Strategy do not result in any new fees or increase any existing fees. This Strategy is intended to assist public water systems to assess their strengths and weaknesses and to provide assistance where needed.

The Workshop is scheduled to be held at the following location and time:

June 29, 2000, 9:00 AM
U. S. Geological Survey
333 West Nye Lane, Room 223A
Carson City, NV

The proposals by the Bureau to be considered and commented on in these workshops do not overlap or duplicate any other processes or procedures established for Nevada public water systems. In addition, these proposals complement, and do not duplicate, the efforts of the federal government to create a stronger, more reliable Safe Drinking Water Program.

Members of the public may make oral comments at these workshops. Persons wishing to submit written comments or documents should submit the material on typed 8-1/2" x 11" pages by June 30, 2000. For issues related to the Capacity Development Strategy, send correspondence to the following address:

Cliff Lawson
Capacity Development Strategy
Bureau of Health Protection Services
1179 Fairview Drive
Carson City, NV 89701

Comments concerning the Capacity Development Strategy may be submitted by FAX to (775) 687-3218. Questions regarding this notice or the workshop may be directed to Cliff Lawson at (775) 687-4750, extension 227.

Reasonable accommodation will be made for members of the public who are disabled and wish to attend the meeting. If special arrangements are necessary, please notify the Bureau of Health Protection Services at (775) 687-4750, extension 227, at least 24 hours prior to the date of the workshop

A copy of this notice and proposed Capacity Development Strategy are available for inspection and/or may be copied at the following locations during normal business hours:

Nevada State Health Division
Bureau of Health Protection Services
1179 Fairview Drive
Carson City, Nevada

Nevada State Library and Archives
100 North Stewart Street
Carson City, Nevada

and in all counties in which an office of the agency is not maintained at the main public library for inspection and copying by members of the public during business hours. Copies of the proposed Capacity Development Strategy may be obtained in person, by mail, or by calling (775) 687-4750, extension 227.

Appendix 6 - Final Public Notice

This Notice will be inserted after EPA approval of the Capacity Development Program.

Appendix 7 – SRF Targeted Technical Assistance List

Drinking Water State Revolving Fund		
PWS Name	PWS #	County
Alamo Sewer and Water G. I. D.	LI-0005-12C	Lincoln
Amargosa Valley Water Assoc.	NY-2558-12C	Nye
Amargosa Water Company	NY-0154-12C	Nye
Baker G. I. D.	WP-0863-12C	White Pine
Beatty Water and Sanitation District	NY-0009-12C	Nye
Blue Diamond Water Coop Inc.	CL-0092-12C	Clark
Blue Gem Mobile Home Estates	WA-3031-12C	Washoe
Caliente Public Utilities	LI-0013-12C	Lincoln
Canyon G. I. D.	ST-5058-12C	Storey
Central Nevada Utilities	NY-0271-12C	Nye
Churchill Ranchos Estates	LY-0813-12C	Lyon
Country Club Estates	CH-0046-12C	Churchill
Country Terrace Mobile Village	WA-0201-12C	Washoe
Crescent Valley Water System	EU-0043-12C	Eureka
Crystal Clear Water Company	LY-0361-12C	Lyon
Dayton Town Utilities	LY-0032-12C	Lyon
Deluxe Mobile Home Park	CH-0047-12C	Churchill
Desert Village Inc.	NY-4067-12C	Nye
Devil's Gate G. I. D. District #1	EU-2574-12C	Eureka
Devil's Gate Water System G. I. D.	EU-2573-12C	Eureka
Doutre Trailer Park	WP-0040-12C	White Pine
Elko, City of	EL-0272-12C	Elko
Equestrian Estates Coop Water Assoc.	CL-0109-12C	Clark
Eureka Water Association	EU-0044-12C	Eureka
Fernley Utilities	LY-0062-12C	Lyon
Four Seasons Park	WA-0195-12C	Washoe
Gabbs Water System	NY-0063-12C	Nye
Gardnerville Ranchos G. I. D.	DO-0066-12C	Douglas
Gerlach G. I. D.	WA-0071-12C	Washoe
Golconda G. I. D.	HU-5029-12C	Humboldt
Goldfield Water Company	ES-0072-12C	Esmeralda
Hadley Subdivision	NY-4074-12C	Nye
Hellman's Trailer Park	WA-0197-12C	Washoe
Indian Hills G. I. D.	DO-0355-12C	Douglas
Indian Springs Sewage Company Inc.	CL-0082-12C	Clark
Jackpot Water System	EL-0088-12C	Elko
Jarbridge Water System	EL-2070-12C	Elko
Kingston Town Water Utilities	LA-0265-12C	Lander
Kyle Canyon Water District	CL-0142-12C	Clark
Lamoille Water Association	EL-0273-12C	Elko
Lander County Sewer and Water District #1	LA-0008-12C	Lander
Lander County Sewer and Water District #2	LA-0006-12C	Lander
Lovelock Meadows Water District	PE-0161-12C	Pershing
Lucky Trailer Park	WA-0279-12C	Washoe
Manhattan Town Water	NY-0165-12C	Nye
Mason Water Company	LY-0166-12C	Lyon
McDermitt Water System	HU-0162-12C	Humboldt
McGill Water and Sewer District	WP-0163-12C	White Pine
Mina/Luning Water System	MI-0074-12C	Mineral

Moapa Valley Water District	CL-0160-12C	Clark
Montello Water System	EL-0169-12C	Elko
Montgomery Mobile Home Park	CH-0050-12C	Churchill
Moundhouse Water System	LY-0838-12C	Lyon
Mountain City Water and Sewer	EL-0170-12C	Elko
North Valley Mobile Home Park	WA-0192-12C	Washoe
Oasis Mobile Home Park	CH-0051-12C	Churchill
Oasis Mobile Home Park	EL-4017-12C	Elko
Oasis RV Park Ltd.	CC-0025-12C	Carson
Orovada Water District	HU-3032-12C	Humboldt
Panaca-Farmstead Water Association	LI-0185-12C	Lincoln
Park Tower Apartments	WA-0799-12C	Washoe
Pine Grove Subdivision	CH-0849-12C	Churchill
Pioche Public Utilities	LI-0186-12C	Lincoln
Reno Sahara Mobile Homes	WA-0701-12C	Washoe
Roark Estates Water Assoc.	CL-0319-12C	Clark
Rosepeak Water System	LY-0029-12C	Lyon
Round Hill G. I. D.	DO-0260-12C	Douglas
Ruth Water District	WP-0164-12C	White Pine
Sage Trailer Park	WA-0231-12C	Washoe
Sheridan Acres Water Company	DO-0069-12C	Douglas
Silver Knolls Mutual Water Company	WA-4027-12C	Washoe
Silver Peak Water System	ES-0363-12C	Esmeralda
Silver Springs Mobile Home Park	LY-0267-12C	Lyon
Silver Springs Water Company	LY-0223-12C	Lyon
South Truckee Meadows G. I. D.	WA-0215-12C	Washoe
Spirit Mountain Utility	CL-0221-12C	Clark
Stagecoach G. I. D.	LY-0224-12C	Lyon
State Water System	CC-0031-12C	Carson
Steamboat Springs	WA-0282-12C	Washoe
Storey County Water District	ST-0240-12C	Storey
Tolas Park Mobile Home Park	CH-0061-12C	Churchill
Tonopah Water System	NY-0237-12C	Nye
Topaz Ranch Estates G. I. D.	DO-0239-12C	Douglas
Tuscarora Water Company	EL-0189-12C	Elko
Utilities Inc. of Nevada	WA-0207-12C	Washoe
Verdi Meadows Utility Company	WA-0196-12C	Washoe
Virgin Valley Water District	CL-0167-12C	Clark
Walker Lake Water District	MI-0268-12C	Mineral
Wells Municipal Water Department	EL-0245-12C	Elko
West Wendover Water System	EL-0246-12C	Elko
Willowcreek G. I. D.	LY-0256-12C	Lyon
Yerington Water Company, City of	LY-0255-12C	Lyon

Appendix 8 – Capacity Development Matrix

A. Health / Water Quality

High:

1. Waterborne disease outbreaks.
2. Fecal / E.coli positive or Coliform Rule Maximum Contaminant Level (MCL) violations.
3. Surface water or ground water under surface water influence (GWUSW) treatment technique violations from turbidity MCL exceedances or <2.0-log inactivation through filtration treatment.
4. Nitrate/Nitrite MCL violations.

Medium High:

1. Surface water or Ground Water Under Surface Water Influence treatment technique violations for failure to meet minimum "CT" (Chlorine x Contact Time) inactivations through disinfection treatment.
2. Volatile Organic (VOC), Synthetic Organic (SOC), Radionuclides, and Inorganic (IOC) Chemical (including Lead Action Level) MCL violations.

Medium:

1. Total Coliform (fecal negative) MCL violations.
2. IOC, SOC, VOC or Radiological contaminant detections at levels greater than 50% of the MCL.

Medium Low:

1. Copper action level violations.
2. IOC, SOC, VOC or Radiological contaminant detections at levels greater than 20% and less than 50% of the MCL.

Low:

1. Ground water contamination greater than the MCL for any chemical contaminant within 1000 feet of the drinking water source (2-year travel time).
2. Ground water contaminant detection (chemical or viral) within 1000 feet of the drinking water source (2-year travel time).

B. Monitoring and Reporting

High:

1. Surface water and GWUSWI water quality reports (turbidity, "CT," etc. 2. Coliform bacteria.

Medium High:

1. Nitrate / Nitrite.

Medium:

1. VOC and SOC.
2. IOC (including Lead).

Medium Low:

1. Radionuclides.

Low:

1. Copper.

C. Certified Operator I Operations

High:

1. No certified operator,

Medium High:

1. Water Treatment Plant operates with no operator on site.

Medium:

1. Certified to an insufficient grade or discipline.

Medium Low:

1. Certified operator is on staff, but no attention is being paid to maintaining the water quality in the distribution system.

Low:

1. Insufficient number of certified operators for the water system operations.

D. Managerial Information

High:

1. Job duties not clearly delineated; No clear line of authority
2. No Operation and Maintenance Plan

Medium High:

1. No regular board meetings; meeting not open to the public
2. No customer policies, such as hook up policies

Medium:

1. No Cross-Connection Control Plan
2. No Emergency Response Plan

Medium Low:

1. No maps of the distribution system or as-built plans
2. No adequate records for the system available

Low:

1. No Well Head Protection or Source Water Protection Plan

E. Financial Capacity

High:

1. No water system operating budget
2. Annual revenue does not cover expenses.

Medium High:

1. The water's systems budget/plan is not used in the calculation of rates. Depreciation is not calculated or funded.
2. Service area income is below the Median Household Income (MHI). Utility rates not calculated as a percentage of MHI.

Medium:

1. No plan for the replacement of critical equipment (capital improvement plan)
2. No reserve account

Medium Low:

1. Generally accepted accounting procedures are not used.

Low:

1. Cash is being transferred to/from the general fund.

G. Relative Weighting Factors

A relative weight factor was created to compare the severity of risk types. Therefore, a point scale was developed to achieve that balance.

Systems can accumulate more than one set of points in a given category. For instance, a system with a nitrate violation, total coliform violation, and a copper action level exceedance would receive points not just for the worst violation, but rather for each as follows:

Nitrate = 5 points

TCR violation = 3 points

Copper = 2 points

Total under Health / Water Quality = 10 points

Capacity Matrix System							
Risk Levels							
Risk Type	High 5 Points	Med. High 4 Points	Medium 3 Points	Med. Low 2 points	Low 1 Point	Relative Weighting Factors	Score
Health / Water Quality						5	
Monitoring and Reporting						3.5	
Certified Operator						3	
Managerial Information						2.5	
Financial information						2	
						Total Score	0.00

Appendix 9 – Technical Assistance Evaluation Tool

**Proposed Inspection Approach for Community Water Systems
“Technical – Managerial – Financial Capability Assessment Form”**

Prepared for

Nevada State Health Division, Bureau of Health Protection Services
under RFP 1046: “Assistance to Communities and Public
Water Systems on Drinking Water Issues”

By

Rural Community Assistance Corporation
May 24, 1999

System Name: _____

System Number: _____

Person completing this assessment: Philip K. Walsack, Rural Development Specialist
Rural Community Assistance Corporation
777 East William Street Suite 109
Carson City, NV 89701
(775) 882-8887

Signature

Date

SRF Pre-Application submitted? No _____
Yes _____ If yes, Project Number(s) _____

Inspection conducted in accordance with Nevada Revised Statutes 445A.200 to 295 (inclusive) and
Nevada Administrative Codes 445A.6751 to 445A.6757 (inclusive).

TECHNICAL CAPACITY

A. SYSTEM DESCRIPTION

Water systems should have available system-wide maps showing facilities, sources of supply and contamination hazards, existing and future services areas are important to the efficient operation of a water system.

1. Does the system have a map(s) that show:

- a. Current service area? **Y** **N**
- b. Location of existing facilities (e.g. each water source, treatment facility, booster stations, storage tanks, and pressure zones)? **Y** **N**

Comment: _____

2. Does the system have as-built plans / specifications, mechanical drawings, and electrical schematics for existing system facilities? **Y** **N**

- a. Is there a procedure in place to ensure as-built drawings are prepared, maintained, and updated for all new and/or proposed facilities? ? (As-built drawings of new facilities must be drawn to scale, show location, size, construction material, and year of installation of each facility.) **Y** **N**

Comment: _____

3. For systems that are expanding and/or consolidating, does the system have maps that show proposed service areas and the location new or consolidated system facilities?

Y **N** **NA**

4. For new systems, does the system have maps that show proposed service areas and the location new system facilities? **Y** **N** **NA**

B. SOURCE CAPACITY ASSESSMENT AND EVALUATION

Water systems should have a high level of confidence that they possess a dependable, long-term supply of water.

1. Has the system performed a water usage analysis to determine average daily demands and maximum daily demands (with seasonal variations) for its current customer base?

Y N

Comment: _____

2. Does the system have a 5-year projection of the water system service area and customer base that is consistent with the local land use plans? **Y N**

Comment: _____

3. Does the system have a 5-year projection of water demand? **Y N**

Comment: _____

4. Has the system completed an analysis of its combined source water capacity to meet average daily and maximum daily demands:

Comment: _____

- a. Under current conditions? **Y N**

Comment: _____

- b. Over the projected 5-year growth period? **Y N**

Comment: _____

5. Has the system conducted a yield analysis for each surface water source:

- a. Currently in use? **Y N NA**

Comment: _____

- b. That it anticipates developing to meet demand over the projected 5-year growth period.

Y N NA

Comment: _____

6. Has the system conducted a yield analysis and description (including static groundwater levels, draw-down patterns, and sustained well yield) for each groundwater source that is:

a. Currently in use? **Y N NA**

Comment: _____

b. That it anticipates developing to meet demand over the projected 5-year growth period.
Y N NA

Comment: _____

7. Has the system conducted an analysis and/or completed a description of its raw water transmission capacity for each of its water sources that are currently in use? **Y N**

Comment: _____

8. Does the system have procedures in place to assess increasing concentrations in water quality parameters from source water quality monitoring data. **Y N**

Comment: _____

9. A map that identifies and located all major source of contamination, actual or potential, within the service area or in adjacent areas that could affect the system sources (e.g. waste disposal sites, landfills, feedlots, etc.). **Y N**

Comment: _____

C. TECHNICAL EVALUATION

Water systems are required to produce drinking water in accordance with Nevada Revised Statutes 445A.200 to 295 (inclusive) and Nevada Administrative Codes 445A.6751 to 445A.67557 (inclusive).

1. For existing systems, is it feasible for this system to be incorporated into or with another existing water system? **Y N**

Comment: _____

2. Is there documentation that the water system complies with state regulations? **Y N**

3. Is there documentation, or can it be shown, the water system has the ability to accurately and continuously measure the quantity of water produced from each water source (with the exception of emergency or standby sources) in order to determine total production?

Y N

Comment: _____

4. Is there documentation, or can it be shown, the system facilities comply with all applicable water quality regulations, e.g., the Coliform Rule, Surface Water Treatment Rule, Lead and Copper Rule, etc? **Y** **N**

Comment: _____

- a. Does the system meet above-described regulatory requirements under maximum system demands? **Y** **N**

Comment: _____

5. Is there documentation, or can it be shown, that the existing system's storage and infrastructure can provide sufficient water to maintain the pressure specified in NAC 445A.875 throughout the distribution system under the following conditions:

- a. Average daily demands? **Y** **N**

- b. Peak daily demands? **Y** **N**

- c. Peak seasonal demands? **Y** **N**

- d. Fire flow (using flows of 1,000 gallons per minute for a 2-hour period)? **Y** **N**

6. Is the system currently experiencing pressure problems? **Y** **N**

Comment: _____

7. Is there documentation, or can it be shown, what is the current condition and the remaining service life of existing facilities? **Y** **N**

Comment: _____

8. Is the system proposing to expand its existing distribution system within the 5-year planning period? **Y** **N**

Comment: _____

9. Has the water system identified which are critical facilities and/or equipment whose failure would result in a water outage and/or a water quality failure in accordance to NAC 445A.66665? **Y** **N**

Comment: _____

10. Are the water system's plans adequate for dealing with such an emergency? **Y** **N**

Comment: _____

D. OPERATIONS PLAN

Water systems should have an operations plan that addresses how the water system will be operated to comply with drinking water requirements and the waterworks standards.

1. Does the system have an operations plan? **Y** **N**.

Comment: _____

2. If the system has an operation plan, has the system submitted the plan to the Health Authority in accordance to NAC 445A.6667? **Y** **N**.

3. If the system has an operations plan, does the plan include the following elements:

a. Operational objectives? **Y** **N**

b. Daily operational practices for the water system (incl. weekly, monthly, etc)? **Y** **N**

c. Emergency operational practices for the water system? **Y** **N**

d. Flushing dead-end mains? **Y** **N**

e. Reservoir inspections and cleaning? **Y** **N**

f. Main repair and replacements? **Y** **N**

g. Responding to consumer complaints? **Y** **N**

h. Maintenance and testing of backflow prevention devices? **Y** **N**

i. Inspecting and exercising water main valves? **Y** **N**

j. Maintenance of master flow meters? **Y** **N**

k. Responsibilities, qualifications and training of operating personnel? **Y** **N**

l. Operation of all production, treatment, and transmission and distribution facilities?

Y N

m. Process and time of month to read meters? Y N

n. Record keeping? Y N

o. Inventory of resources that are used for normal operations? Y N

p. A maintenance plan for all facilities to be constructed under the Nevada SRF? Y N

Comment: _____

E. CERTIFIED / QUALIFIED OPERATORS

The Nevada Revised Statutes (445A.875) sets a system of classification of operators of community water systems and non-community water systems who are required to be certified, and to maintain their certification through continuing education for the renewal of their certification.

1. Does the system have an operator with the appropriate certifications from the State of Nevada? Y N

a. If yes, identify the name, grade and certification number of the operator. If not, identify the name, qualifications, and experience of the person(s) operating the water system.

Comment: _____

F. CROSS CONNECTION CONTROL

The Nevada Revised Statutes (445A.67185) requires that community water systems and non-community water systems have a program for the control of cross connections.

1. Does the system have a documented program for the control of cross connections? Y N

Comment: _____

2. Has the system submitted the documented program to the Health Authority in accordance to NAC 445A.67185? Y N

G. TRAINING / EXPERIENCE

In order to reliably comply with existing requirements and stay current with new requirements, new technologies, and new hazards, all water system personnel – including board members – should be adequately trained with a commitment to obtain continuing education as necessary.

1. Does the system have documentation, or can it show the relevant training and experience of those responsible for the management of the water system? **Y** **N**

Comment: _____

2. Does the system have documentation, or can it show the relevant training and experience of those responsible for the operation of the water system? **Y** **N**

Comment: _____

3. Does the system have a plan to keep the managers and operators of the water system current with the requirements of their system? **Y** **N**

Comment: _____

MANAGERIAL CAPACITY

A. ORGANIZATION

A clear description of the organization, including a functional organizational chart, is vital for any organization to provide clear lines of authority and communication between management and employees and to avoid confusion, mistakes, or misunderstandings in the daily operation and management of the system. It is also essential to define the roles of each person to avoid duplication and ensure all essential functions are covered.

1. Does the system have a functional organizational chart? **Y** **N**

Comment: _____

2. Does the system have job descriptions detailing the duties and responsibilities of all key personnel involved in the management or operation of the water system (including board of directors or councils, employees, and contract personnel)? **Y** **N**

Comment: _____

3. Are the names, positions and titles of those responsible for establishing policies, for ensuring compliance with state regulatory drinking water requirements, and for day-to-day operations of the water system identified within the Policies and Procedures or similar manual of the system? **Y** **N**

Comment: _____

4. What is the frequency of meetings?

Comment: _____

5. If the operator is not full time, how much time is dedicated to the operation of the system and what is the operator's availability?

Comment: _____

6. If system operation/management is contracted out, is a copy of the contract readily available? When was it last reviewed? **Y N NA**

Comment: _____

B. OWNERSHIP

One determinant of regulation is how the system is owned. In applying for funding, it is essential the system demonstrate they own or control the facilities needed for the operation of the system

1. What is the type of system ownership (e.g. sole proprietorship, partnership, corporation, mutual, GID or other governmental agency) along with the name(s), address(es), and phone number(s) of the owners.

Comment: _____

A list of the current Board of Directors is attached to this Inspection Form as Attachment A.

2. Are there any other public water systems that are or have been under the same ownership or managed by the same parties? **Y N NA**

Comment: _____

3. If the system is under temporary ownership (developer), what is the contract and schedule for the transfer of system ownership to the future owner? **Y N NA**

Comment: _____

4. If the system has a single proprietor, is there a contingency plan for continuing operations in the event that the owner becomes incapable of carrying out his/her responsibilities?
Y N NA

Comment: _____

C. WATER RIGHTS

Water systems should possess copies of all water rights (i.e. permits, licenses, or other agreements) owned or controlled by the system or a letter of confirmation from the authority that granted each of the water rights.

1. Does the water system have a copy of all water? **Y** **N**

Comment: _____

2. If the source water is subject to permit requirements, is there a copy of the permit on file?
Y **N** **NA**

Comment: _____

3. If water is pumped from an adjudicated groundwater basin, does the system have documentation of approval from the basin water master? **Y** **N** **NA**

Comment: _____

4. If additional water rights are needed to serve future growth (5 years), is there a plan to obtain those additional water rights? **Y** **N** **NA**

Comment: _____

D. EMERGENCY / DISASTER RESPONSE PLANS

In order to provide reliable service and to minimize public health risks from unsafe drinking water during emergencies, water system should have a plan that defines how it will respond to emergencies and/or disasters that are likely to affect its operation.

1. Does the system have a plan that covers all disasters/emergencies that have historically occurred in the water systems service area? **Y** **N**

Comment: _____

2. Has the Emergency Response Plan been submitted to the Health Authority in accordance with NAC 445A.66665? **Y** **N**

3. Has the system designated the responsible personnel and identified a clear chain of command and responsibilities? **Y N**
4. Does the system have an inventory of resources that are used for and available for emergencies? **Y N**

Comment: _____

5. Is there a communications plan that describes a designated location for an emergency operations center, emergency contact information for equipment suppliers, emergency phone and radio communication capabilities, and coordination procedures with governmental assistance, and public notification procedures? **Y N**
6. Are there emergency procedures to assess damage to water system facilities, provide logistics for emergency source activation and repairs, monitor progress of repairs and restoration, communicate with health officials and water users, and document damage and repairs? **Y N**
7. Has the system identified steps that will be taken to resume normal operations and to prepare and submit reports to appropriate agencies? **Y N**

Comment: _____

FINANCIAL CAPACITY

A. BUDGET PROJECTION

The budget projection is a written financial plan for the operation of the water system over a five-year period. This is a critical indicator of a water system's capacity because it indicates if a system's revenues and reserves will meet the water system's expenses.

1. Does the system have a 5-year projection of anticipated revenues and expenditures for the system? **Y** **N**

Comment: _____

2. Does the 5-year projection include projected expenses to be incurred as a result of implementing a system's Capital Improvement Plan and its equipment replacement schedule? **Y** **N**

Comment: _____

3. Does the system maintain on file a consolidated financial statement (budget sheet and income statement) for each of the past two fiscal years? **Y** **N**

Comment: _____

4. What is the system's current rate structure?

Comment: _____

5. Has the system determined the average annual cost of producing water per customer for the last calendar year? **Y** **N**

Comment: _____

B. CAPITAL IMPROVEMENT / EQUIPMENT REPLACEMENT PLAN

In order to provide a continuous supply of potable water to its customers, every water system must have the capacity to make capital improvements and replace equipment in a timely manner. The development of a prioritized capital improvement plan is one way systems can demonstrate that capacity.

1. Does the system have a Capital Improvement Plan? **Y** **N**

Comment: _____

2. What is the method the water system will use to develop the funds necessary to replace old and outmoded equipment, facilities and pipes in the system? The estimated life of major system components must be specified in this description.

Comment: _____

C. BUDGET CONTROLS

The budget of a water system is basically a financial plan for the existing and future operation of the water system. It is essential that the budget be adhered to, or referred to monthly to measure any changes. To do this, a system must have budget controls and reporting to appropriate levels of authority. There must also be adequate internal controls, including periodic reviews of the budget status and meetings to modify the budget if needed. This will assure that revenues are collected, expenses are controlled and reserve accounts are maintained.

1. What are the water system's budget/expenditure control procedures?

Comment: _____

2. What typical reports are produced to monitor and track income and expenses?

Comment: _____

3. What methods are used by the water system to prevent any co-mingling of revenue sources that may be prohibited by state or federal law?

Comment: _____

**STAKEHOLDER COMMENT AND INPUT SESSIONS
ON DRAFT CAPACITY DEVELOPMENT STRATEGY

FOR
NEVADA BUREAU OF HEALTH PROTECTION SERVICES

Carson City
June 29, 2000**

**Facilitated by:
University of New Mexico Environmental Finance Center**

Summary Report

This comment and input session was sponsored by Nevada's Bureau of Health Protection Services (BHPS) and was facilitated by the University of New Mexico Environmental Finance Center (EFC). The purpose of this meeting was to gather input and comments regarding the draft Capacity Development Strategy for Nevada. The draft strategy was developed from input gathered during stakeholder meetings held in November and December of 1999. The attendees at the meeting represented a variety of organizations and who have an interest or "stake" in water. A list of invitees to the input sessions and a list of actual attendees are attached to the end of this report along with a copy of the letter inviting the participants.

The meeting generated many excellent comments and suggestions for consideration and the EFC would like to thank all of the participants for their willingness to share ideas and for their time and energy. Stakeholder participation is crucial to the successful development of the BHPS Capacity Development Strategy.

The Stakeholder Comment and Input Session followed the agenda below.

Agenda

Welcome and Introduction

Brief Review of SDWA Requirements for Capacity Development Strategy

Discussion of the Proposed Method of Prioritizing Systems for Assistance

Discussion of Various Aspects of the Proposed Program to Assist Systems

- Capacity Assessment Form
- Public Education Program
- Board Training
- Water Handbook
- Enhanced Sanitary Survey
- Systems Partnering with Other Systems

Discussion of Proposed Method of Measuring Improvements

Continued Stakeholder Involvement

All of these topics were discussed in a large group setting. All major ideas discussed were recorded and are listed below. Each topic is discussed separately.

Brief Overview of the Capacity Development Strategy Requirements and Draft Capacity Development Strategy Document

The 1996 (SDWA) amendments included requirements that the state must develop a Capacity Development Strategy for existing public water supply systems. In this context, capacity development is having the technical, managerial, and financial capabilities to operate over the long term in compliance with all state and federal regulations while providing safe, reliable, quality water at an affordable price. Capacity development is meant to be a process of continual improvement, not a single point in time and an individual system's capability falls along a continuum of capability. All systems can improve their capability or capacity and no system is defined as "non-viable" under this concept.

To assist systems in improving their technical, managerial, and financial capabilities, states must develop a Capability Development Strategy or plan to indicate how they will provide assistance. The five elements that must be considered, include:

- Method of prioritizing systems most in need of technical, managerial, and financial improvements
- Identification of factors that impair or enhance capability within the state
- Determination of how the state will use its resources and authorities to: assist systems in complying with regulations, encourage systems to form partnerships, and assist systems with the training and certification of operators

- Development of a means of establishing a baseline and measuring improvements in system capability
- Identification and involvement of individuals interested in the strategy process

The state must develop and implement a capability development strategy or it risks losing a portion of the money allocated for the State Revolving Fund, set up to pay for system improvements. EPA does not have any mandates on the actual content of the plan; the state is free to develop a plan that will best meet the needs of the water systems in the state. However, the state must consider input from stakeholders to ensure that the strategy does meet the needs of the systems.

State strategies are meant to be “living” documents meaning that they are not just to be developed and put on a shelf. The initial strategy should be thought of as a starting point only. The plan outlined in the strategy should be implemented, measured, reviewed and revised as the state moves forward. Two years after the enactment of the strategy and every three years after that, the states must report on the progress of the strategy. This reporting process will help ensure that the state is continually evaluating and revising its strategy.

A key concept was stressed during the introductory session that the main purpose behind capacity development is looking for opportunities to help systems. With this concept in mind, the state can develop programs to best assist systems.

Nevada developed a draft capacity development strategy based on the requirements of the EPA SDWA and that strategy was sent out for review in June 2000. All attendees received a copy of the draft strategy.

Topic 1: Prioritization of Systems Most in Need of Assistance

BHPS will use a matrix approach to evaluate systems most in need of technical, managerial, and financial capacity assistance. The matrix includes five factors – Health/Water Quality, Monitoring and Reporting, Certified Operator, Managerial Information, Financial Information – with a point score from 5 (high need) to 1 (low need) for each factor. Also, the five factors have relative weights to indicate greater importance for problems in one area as opposed to other areas. The number of points for each factor is multiplied by the weighting factor to calculate a total score for each factor. The scores for the factors are then added together to obtain a total score for the system.

The matrix approach is described in Appendix 8 of the draft document. Appendix 8 lists specific factors or criteria that will result in a particular score for each factor. All of the attendees were asked to thoroughly review Appendix 8 and the approach outlined. They were then asked to provide any comments on the approach. Those comments are summarized below.

Comments on the Prioritization:

- Two typographical errors in the Health and Water Quality factors write up. Under medium high GWLJSWI should be GWUSWI. Under medium IVICL should be MCL
- Who will manage the matrix to determine systems most in need of T, M, F assistance? (This question was answered at the session that BHPS will be the entity to manage the matrix.)

- How many years back will BHPS go back to determine the compliance record? This issue was discussed by the group with considerable input from attendees. It was decided that one year would be a good time frame.
- For Certified Operator category, under the medium low items, add outstanding sanitary survey deficiency items (i.e., deficiencies noted on the sanitary survey that were not addressed at the time of the next survey.) This item may need to be added to the sanitary survey form to make sure it is noted at the time of the survey if it is not already on there.

Overall, the attendees felt very positively about the approach and felt it was a good place to start. The approach could be reexamined in a year or two to see if modifications needed to be made.

Topic 2: Assessment of System Capacity

Appendix 9 of the Draft Capacity Development Strategy contains a capacity assessment form that can be used by a Technical Assistance provider to determine the TMF deficiencies facing the system. The attendees were asked to review the assessment form and provide comments on the process. Summarized below are the major comments discussed during this Session.

- The form is called an "inspection" approach. This terminology seems to sound regulatory or coercing and this program is supposed to be voluntary. Inspection has negative connotations and will cause problems as the capacity development program moves forward. This term should be changed to something else, such as evaluation.
- In some cases the Board of a water system does not agree with the results of the assessment. There should be an opportunity for the Board to discuss its concerns regarding the results with the reviewer prior to finalizing the report.
- There should be an "exit interview" with the Board, the operator, public works officials, and other appropriate personnel to discuss the results of the assessment. This approach may even facilitate a dialogue process between the board and operator , which may be an additional positive aspect of the survey.
- Tool should be simpler for small systems.
- Nevada has a spreadsheet approach for financial review that could be incorporated into the process. The system should use it for their own financials. It should be used as a tool by the technical assistance provider to help the system, but it should not be used as an evaluation tool.
- The format of the financial portion should be changed from a yes/no approach to a more lengthy essay style.
- Could the assessment form deficiencies be added to the enhanced sanitary survey? Would this give a little more weight and importance to the process? A discussion that followed this comment brought out the point that the ties to enforcement if this were done would ruin the voluntary nature of the program and would end up negatively impacting the process instead of positively impacting it.

Topic 3: Programs to Assist Systems with Compliance

Currently the BHPS has many programs that it operates that assist systems with compliance and in improving overall TMF capacity. There are a few programs under development now and several programs that BHPS would like to develop and implement in the future as part of the capacity development program. The draft strategy document discusses each of these items. The attendees were asked to comment about those programs that are considered for future development.

The discussion regarding each of the programs is summarized below.

Public Education

- National Rural Water Association (NRWA) has a well head protection program that includes public education and board training. This information could be used
- The program needs to be evaluated annually to make sure it is working and not just wasting money.
- CCRs were an attempt to provide public education materials, but they are too hard to understand and they did not do the job. Elko used a different approach that may be worth examining. Also, University of Nevada - Reno (UNR) did a study on CCRs and their effectiveness that might be worth looking at. It is difficult to present technical information to the general public in an easy to understand way. The CCRs should include rate information.
- Rural Development does a rate study for the state, which is a good public information/education tool.
- Rate structures are not necessarily a good measure of the systems capabilities because they are too political. The system may be working well, but may have difficulty with the political aspect of setting rates. Not a good tool for capacity assessment.
- Las Vegas water system does customer surveys to determine how the customers feel about the system. They get a good response rate from the process. One result was that customers said they want more information about the system.
- Having some standard information to share with newspapers would help systems.

Board Training

- People should receive a positive inducement to come to Board Training not a negative one. "Bonus Points" should be given to systems that attend Board Training or receive certification for SRF funding.
- Elected municipal officials are in a different position than board members. The BHPS could not use an approach like Mississippi's mandatory board training enforcement process of allowing board members to vote out a board member that does not get certified for municipal officials because they could not be voted out in this manner.
- Board of Directors or management team should be a part of the team to make sure the water system is working well.
- Nevada League of Cities and Nevada Association of Counties has certificates for "Certified Public Officials." Could this program include water board and municipal management personnel? Could BHPS tie to these organizations to achieve Board Training?

Water Handbook

- Consensus of the attendees was that this was a very good idea and very much needed.
- A hard copy is needed; not enough people have Web access.
- The handbook would need to be updated annually. A calendar approach combining this information with the training information would be a good way to do this. The calendar could be mailed out annually to all water systems.

Enhanced Sanitary Survey Process

- Systems that are having problems should be required to hook up to a viable system. There are too many water systems that are consistent problems and they shouldn't be in the water business. (New system strategy is attempting to address this issue for the future.)
- Possibly, BHPS could include "so you want to be a public water system" type information in the public education process to try to ensure that potential water system owners know how difficult it is to run a public water system.
- Problem NCNTs and TNCs change ownership often which makes the situation worse.
- Enhanced Sanitary Surveys should be performed every 6 years, instead of every 3.

Topic 4: Encouraging Partnering Between Systems

A brief discussion was presented before this topic to describe partnering. Partnering is any activity that involves water systems working together. Partnering may be formal or informal, it can involve any state or federal agency or it can be strictly "grass roots" between systems. It may be as simple as regular meetings of water systems within a certain region or as complex as systems joining together to form one operating entity running one system. It may involve physical interconnection, but in a large, rural state like Nevada this type of partnering would be uncommon.

Attendees were asked to describe partnering efforts that were ongoing in Nevada and other things that BHPS could do as part of its capacity development strategy to further encourage partnerships. Listed below is a summary of that discussion.

- Infrastructure for Nevada Communities (INC) process is a partnership process. The various agencies meet, in part, to talk about systems working together to solve problems.
- Rural systems are already working together out of necessity and sharing equipment and other things. This process is informal partnering.
- Lifeline Utilities Task Force exists in Washoe County to look at emergency response. This program includes all utilities in the County, not just water, but is a mechanism to get systems talking to each other.
- Nevada Test Site Corridor was set up to deal with Yucca Mountain issues, but it may be a partnering approach.
- The BHPS should use its enforcement authority when the system is in very bad shape in terms of compliance and capacity to force it to hook up to a good system.
- The Nevada Rural Water Conference could encourage informal networking groups to form to get operators and systems talking to each other.
- Partnering efforts or networking groups could be initiated through Nevada League of Cities or Nevada Association of Counties.
- The Las Vegas area has the Southern Nevada Water Authority that includes water purveyors in the area that meets on a regular basis (monthly).

Topic 5: Measuring Success

Several measurements of success were listed in the Draft Capacity Development Strategy. Attendees were asked to comment on those proposed measures. The following information summarizes the comments.

- SNCs (Significant Non-Compliers) are not good measurements because the state only has one SNC. As new regulations come in, such as Arsenic and Radon, the number of SNCs may go up temporarily as systems try to comply.
- Certified Operator is a good measure for Nevada.
- Number of participants at training sessions may not be a good measure for Nevada because there are too few people in the state to make it valid. Maybe the number of systems impacted by training would be a better measure.
- Consider adding a measure to look at the geographic spread of training and whether or not that is improving.

Topic 6: Continued Stakeholder Involvement

Because the capacity development process is intended to be a living, breathing process with changes as the program continues, there should be some type of continued stakeholder involvement. The stakeholders were asked to provide feedback on that involvement.

The consensus of the group was that meeting should be held twice per year and any information that needed to be shared in between these meetings could be shared via the Web site or e-mail. The meetings should have a very specific agenda that should be sent out at least one month in advance. One of the meetings should be at the Nevada Rural Water Association Annual Conference so the state can involve more water systems.

Topic 7: Additional Comments

Attendees were asked to provide any additional comments. Those comments are highlighted below.

- The stakeholder list should include contract operators.
- An additional enhancement should be added to the Capacity Development Strategy - the long-term, low-interest loan program that Clark County has.
- BHPS should create sampling monitoring schedules for every system similar to what Montana is doing.
- BHPS should put out a training calendar similar to Montana's training calendar.

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